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# The Medicare Preferred Provider Organization Demonstration: Plan Offerings and Enrollment

## Report

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## ABSTRACT

The Medicare Preferred Provider Organization (PPO) demonstration is a major initiative of the Centers for Medicare & Medicaid Services (CMS) to provide an additional managed care option for Medicare beneficiaries. PPOs are the most popular form of insurance in the employer-sponsored insurance market, but Medicare beneficiaries had little access to them before the inception of the demonstration in 2003. PPOs offer greater provider choice than Health Maintenance Organizations (HMOs), but greater potential for cost control than traditional Medicare fee-for-service (FFS) plans. PPOs accomplish this through a network of providers with negotiated price discounts, but coverage—often with greater cost sharing—for out-of-network services. In the Medicare Modernization Act of 2003 (MMA), Congress foresaw a key future role for PPOs in Medicare by authorizing regional PPOs beginning in 2006.

This report addresses three key outcomes of the Medicare PPO demonstration:

1. Availability of PPOs
2. Plan Offerings
3. Enrollment

**Summary of Findings on Availability of PPOs**

*PPOs are widely, but unevenly available. Demonstration PPOs are offered in 21 states and 222 counties. Approximately one-quarter (24 percent) of Medicare beneficiaries can enroll in a PPO, including 29 percent in metropolitan counties and 6 percent in nonmetropolitan counties.*

*The Medicare PPO demonstration provides no evidence that PPOs are more likely than other plan types to expand Medicare managed care options in rural areas.*

*PPOs have located mostly where other coordinated care options are available, but have increased beneficiary choice of such options.*

*Higher demonstration county payment rates did not increase PPO availability.*

*In multivariate analysis, the most powerful predictor of PPO plan entry is greater existing managed care presence in a market area.*

**Summary of Findings on PPO Plan Offerings**

*PPO monthly premiums are generally higher than competing CCP options, but lower than the most popular Medigap plan.*

*PPOs are more likely than competing CCPs to provide some coverage for prescription drugs; but among plans with a drug benefit, PPO coverage is less generous on average.*

*All demonstration PPOs cover a core set of benefits out of network. A lower proportion of PPOs than competing CCPs provide vision, hearing, and dental benefits in-network.*

*Unlike competing CCPs, few PPOs require referrals to see physician specialists; but PPO physician networks are not larger than the networks of competing CCPs.*

*In-network PPO cost sharing is considerably lower than in original Medicare FFS, and for inpatient services, lower than in competing CCPs.*

*Although a higher percentage of PPOs than competing CCPs have global in-network out of pocket maximums, most PPOs do not have global out-of-pocket maximums.*

*Enrollees in demonstration PPOs have higher predicted total out-of-pocket costs than enrollees in competing CCPs at all health status levels, but the difference narrows as health declines. PPOs (and CCPs) provide better financial protection as health deteriorates than FFS Medicare, but less protection than FFS supplemented with the most popular Medigap plan.*

**Summary of Findings on Enrollment in PPOs**

*Most of the initial enrollment in the PPO demonstration was in a single contract, Horizon Healthcare of New Jersey. Non-Horizon enrollment has grown steadily and now accounts for more than half of total demonstration enrollment of about 105,000 beneficiaries. Enrollment in many demonstration contracts remains quite small.*

*The enrollment market share for PPOs in their service areas is 1 percent of all beneficiaries and 5 percent of Medicare health plan enrollees.*

*Of PPO enrollees, 42 percent were previously in FFS Medicare, 43 percent were previously in another Medicare health plan, and 15 percent are recent enrollees in the Medicare program. These proportions are similar to competing CCPs.*

*The demographic and health status characteristics of PPO enrollees were similar to those of recent enrollees in competing CCPs, except that PPOs enrolled fewer blacks and other minorities and fewer Medicaid recipients. Like other CCPs, PPOs are experiencing favorable selection relative to Medicare FFS.*

*The voluntary disenrollment rate among all PPO demonstration enrollees is similar to the rate among competing CCP enrollees. However, excluding continuing enrollees in the Horizon demonstration plan, PPO disenrollment is modestly higher than disenrollment among recent enrollees in competing CCPs.*

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## EXECUTIVE SUMMARY

The Medicare Preferred Provider Organization (PPO) demonstration is a major initiative of the Centers for Medicare & Medicaid Services (CMS) to provide an additional managed care option for Medicare beneficiaries. PPOs are the most popular form of insurance in the employer-sponsored insurance market, but Medicare beneficiaries had little access to them before the inception of the demonstration in 2003. PPOs offer greater provider choice than Health Maintenance Organizations (HMOs), but greater potential for cost control than traditional Medicare fee-for-service (FFS) plans. PPOs accomplish this through a network of providers with negotiated price discounts, but coverage—often with greater cost sharing—for out-of-network services. In the Medicare Modernization Act of 2003 (MMA), Congress foresaw a key future role for PPOs in Medicare by authorizing regional PPOs beginning in 2006. The outcomes of the PPO demonstration provide valuable information for evaluating and refining the role of PPOs in Medicare.

This report addresses three key outcomes of the Medicare PPO demonstration:

1. Availability of PPOs

    - Where are PPO demonstration products currently offered?
    - How many Medicare beneficiaries can enroll in them?
    - How do PPOs expand the managed care options available to Medicare beneficiaries?
    - Why are PPOs offered in some areas but not others?

2. Plan Offerings

    - What are the premiums, benefits, and cost-sharing requirements of demonstration PPOs?
    - How are PPO plans similar to and different from other insurance options available to Medicare beneficiaries?
    - How do the out-of-pocket costs and financial protection of PPOs compare with other insurance options?
    - How does provider access in PPOs compare with other managed care plans?

3. Enrollment

    - How many Medicare beneficiaries have enrolled in PPOs?
    - What is the trend in PPO enrollment?
    - How concentrated is enrollment in certain contracts?
    - What market share do PPOs command?
    - Are PPO enrollees primarily drawn from FFS or other managed care plans?
    - How do the demographic and health status characteristics of PPO enrollees compare with FFS and managed care enrollees?

A previous report (Greenwald et al., 2004) presented results of case study interviews with managed care organizations that offer demonstration PPOs, including characteristics of these organizations, why they joined the demonstration, and detailed case studies of each market. The current report provides a quantitative analysis of the demonstration PPOs. A future report will estimate the impact of the demonstration on Medicare program payments. A survey of PPO, HMO, and FFS beneficiaries is also being conducted in each demonstration PPO service area. The survey results will be available in 2005.

This Executive Summary provides an overview of key findings. Throughout the Executive Summary and report, the Medicare-defined class of "coordinated care plans" (CCPs)[1] is used as a comparison for PPOs. CCPs, nearly all of which are HMOs, have a network of providers and can be thought of as "managed care plans." All Medicare+Choice (M+C), now renamed Medicare Advantage (MA), plans are CCPs except for private FFS plans. The service area of "competing CCPs" overlaps the combined service area of PPO plans. We compare 232 competing CCPs to the 61 PPO demonstration plans. "Medicare health plan" is used as the umbrella term to refer to any private plan that provides full Medicare benefits and replaces traditional Medicare FFS. Medicare health plans include M+C plans and all other private health plans, including demonstration and cost plans. "Medigap" refers to insurance that is supplemental to Medicare FFS and primarily pays the FFS cost sharing. We use "PPO" to refer to PPO demonstration plans.[2] PPO and comparison plans that are open to retirees of particular employers only are excluded from our analyses.[3]

**Summary of Findings on Availability of PPOs**

PPO demonstration plans were implemented in a short time frame, and, as a result, they were largely limited to existing M+C contractors and areas where these plans had Medicare or commercial provider networks. Therefore, generalizability to other situations, such as Medicare Advantage regional PPOs, is limited. Nevertheless, the service areas of demonstration PPOs, especially as compared to Medicare CCPs, gives some indication of where plan sponsors felt the PPO model would be most successful.

*PPOs are widely, but unevenly, available.*

***Figure ES-1*** maps demonstration PPO service areas as of April 2004. The demonstration includes 17 parent companies operating 35 PPO contracts[4] and 61 plan options.[5,6] PPO service

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1 Demonstration CCPs are excluded in the analyses.

2 There are a small number of non-PPO-demonstration Medicare PPO plans.

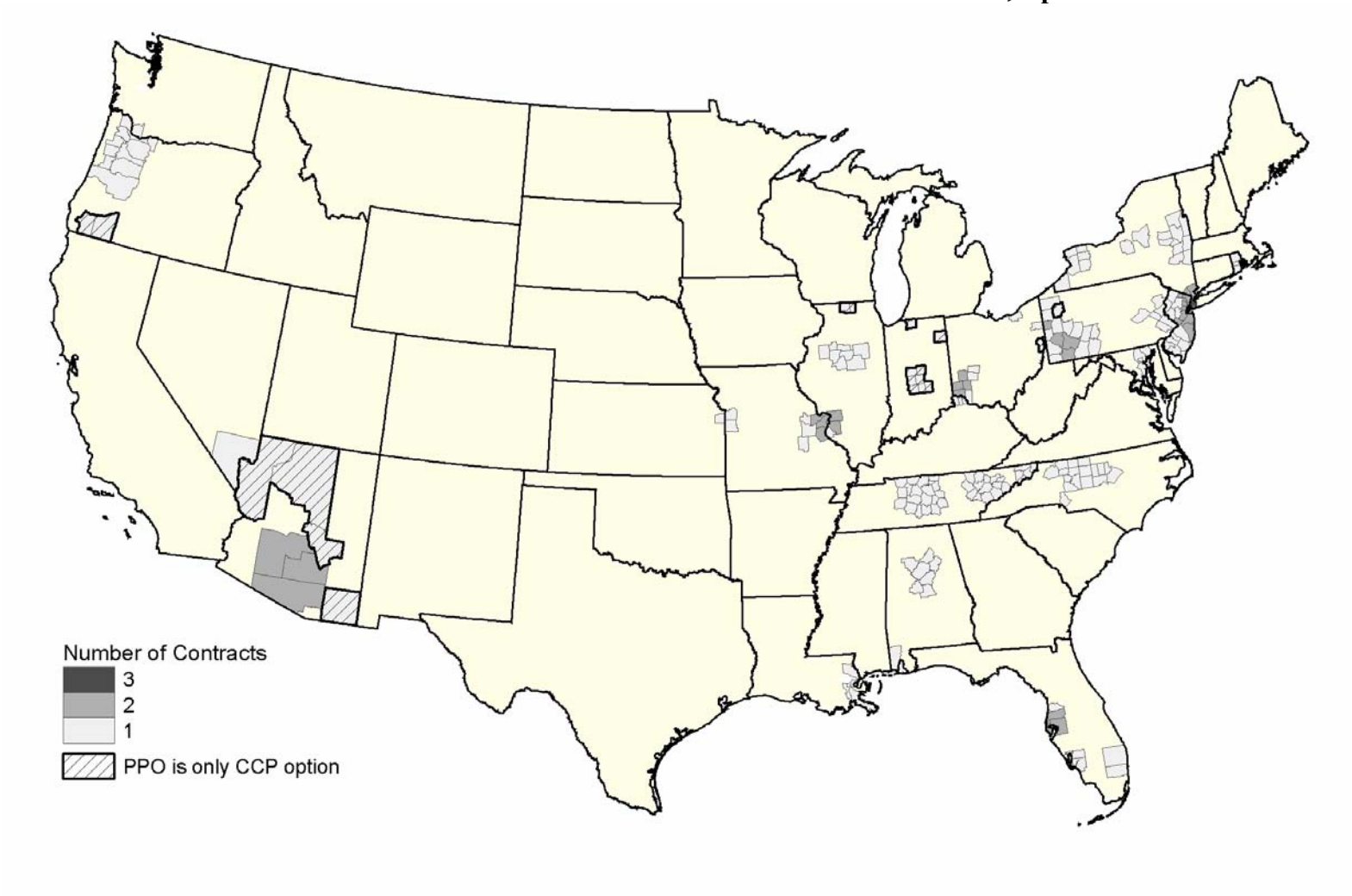
3 It is not possible to fully exclude employer-only plans in analyses using the Medicare Enrollment Database. For these analyses, we excluded counties where only employer-only plans are offered.

4 Health Net in Arizona has withdrawn effective January 1, 2005, leaving 34 PPO contracts and 57 plans for 2005.

5 Parent companies are organizations, typically insurers, that sign (possibly multiple) contracts with CMS to provide Medicare benefits to enrolled beneficiaries. Multiple plan options may be offered under a contract. A plan option refers to a specific benefit package offered in a specific service area.

6 There are an additional 8 employer-only plans for a total of 69.

**Figure ES-1**
**Service areas of Medicare PPO demonstration contracts, April 2004**




NOTE: PPO is PPO demonstration plan. CCP is coordinated care plan. Excludes employer-only plans.
SOURCE: RTI analysis of CMS HPMS April 2004 file.

areas are located in 21 states in all 4 census regions, and in 9 of the 10 CMS regions (there are no PPO demonstration plans in the CMS Denver regional office area). PPO contracts are concentrated in the Mid-Atlantic, Midwest, and Southeast states (29 of 35 contracts). Notably, no demonstration contracts are operating in California, the largest Medicare managed care market.[7]

***Table ES-1*** presents the percentage of Medicare beneficiaries and counties in which PPOs and other CCPs are available by urbanicity. The findings suggest a preference of the demonstration PPOs to locate in or near more urban areas. PPOs are offered in 7 percent of all counties, including 27 percent of large metropolitan counties, 10 percent of medium/small metropolitan counties, 5 percent of micropolitan (small city) counties, and 1 percent of rural counties. All nonmetropolitan counties in which PPOs are offered are adjacent to metropolitan areas. PPOs are available in less than half as many counties as CCPs. Nationwide, approximately one quarter (23.9 percent) of Medicare beneficiaries can enroll in a PPO, including 29 percent in metropolitan counties and 6 percent in nonmetropolitan counties.

**Table ES-1**
**Availability of PPOs and coordinated care plans by urbanicity[1]**
**Percent of beneficiaries and counties where at least one plan is available**

| | PPO | | CCP | |
|---|---|---|---|---|
| | Beneficiaries | Counties | Beneficiaries | Counties |
| Total | 23.9% | 7.1% | 59.7% | 18.7% |
| Metropolitan, Total | 28.9 | 16.6 | 72.2 | 38.6 |
| Large[2] | 37.3 | 27.0 | 88.0 | 55.7 |
| Medium/Small[3] | 16.4 | 10.2 | 48.5 | 28.1 |
| Nonmetropolitan, Total | 5.9 | 2.0 | 14.7 | 8.1 |
| Micropolitan | 9.4 | 4.7 | 18.4 | 11.7 |
| Rural[4] | 1.3 | 0.7 | 9.9 | 6.3 |

NOTES:

[1] Includes Part A and Part B plans and beneficiaries only. Excludes employer-only plans. PPO is PPO demonstration plans.

[2] Metropolitan areas of one million or more population.

[3] Metropolitan areas of less than one million population.

[4] Nonmetropolitan, nonmicropolitan.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

[7] PacifiCare had planned a demonstration PPO in Southern California, but withdrew it after encountering difficulties establishing a provider network because of physician group success with and preference for the HMO model (Greenwald et al., 2004).

*The Medicare PPO demonstration provides no evidence that PPOs are more likely than other plan types to expand Medicare managed care options in rural areas.*

***Figure ES-2*** compares the distribution by urbanicity of counties where PPOs and other CCPs are available. A higher proportion of PPO than other CCP service area counties are in large metropolitan areas (51 versus 39 percent), and a lower proportion are rural (4 versus 15 percent). That is, demonstration PPOs are relatively more likely than existing CCPs to locate in large metropolitan areas and less likely to locate in rural areas. However, it is important to note that the short time frame for demonstration implementation required reliance on existing managed care provider networks and may have limited PPO entry into rural counties, which largely lack existing networks. The inability to negotiate favorable discounts with monopoly rural providers and other issues may continue to hinder PPO entry into rural areas in the long term (Greenwald et al., 2004).

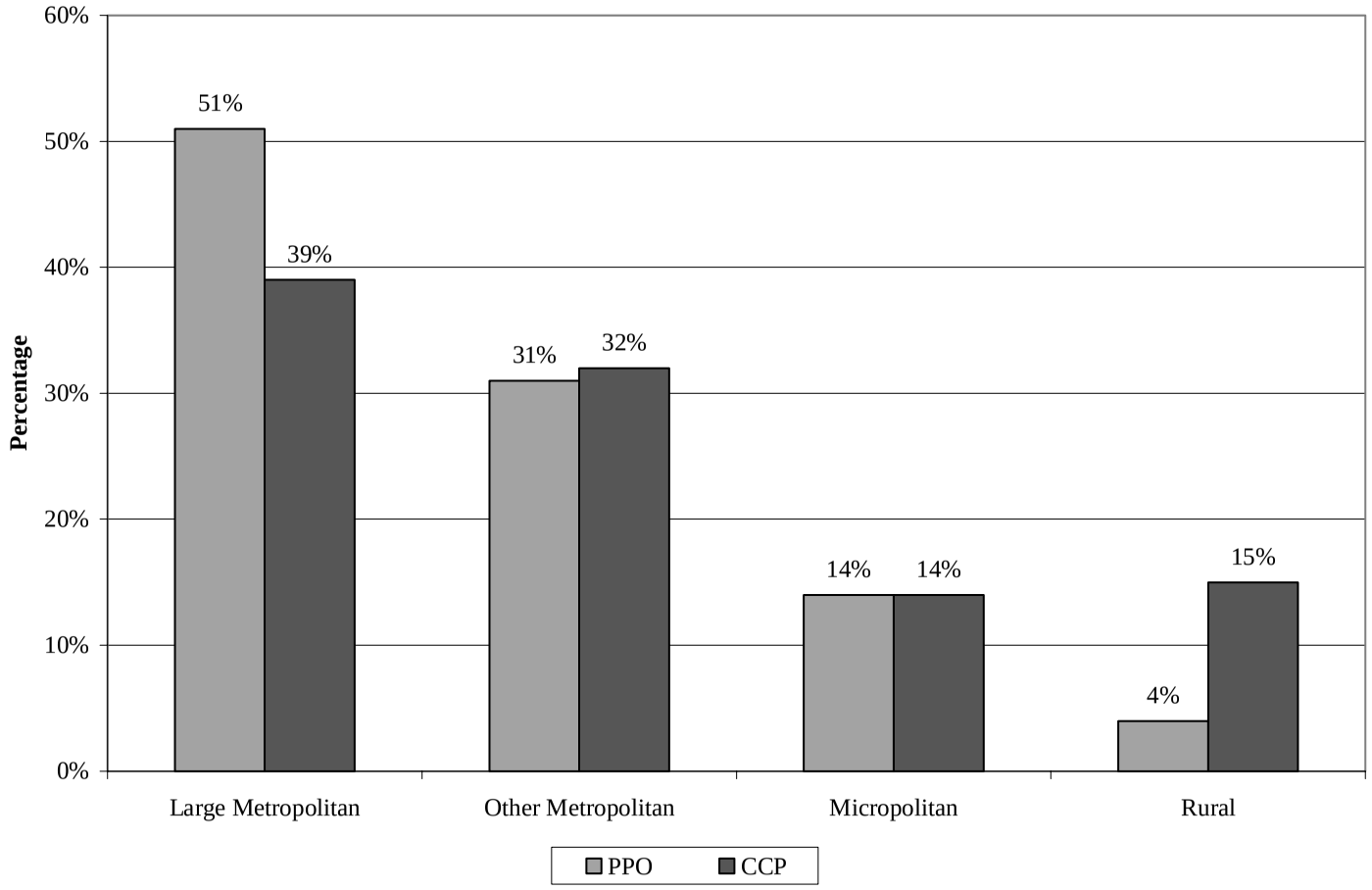
*PPOs have located mostly where other coordinated care options are available, but have increased beneficiary choice of such options.*

PPOs have located mostly where other CCPs are offered, but have increased the choice of such plans for Medicare beneficiaries. ***Table ES-2*** presents the distribution of PPO service area beneficiaries and counties by number of other CCP contracts available. In 10 percent of their service area counties containing 5 percent of total service area beneficiaries, PPOs are the only coordinated care option. In 32 percent of counties containing 20 percent of beneficiaries, PPOs increase beneficiaries' choice of coordinated care contracts from one to two, in 30 percent of counties with 22 percent of beneficiaries from two to three, and in 29 percent of counties with 53 percent of beneficiaries to three or more other coordinated care contracts. Hence, in over two thirds of their service area counties containing nearly half of service area beneficiaries, PPOs are adding a choice to zero, one, or two other established coordinated care contracts.

*Higher demonstration county payment rates did not increase PPO availability.*

As part of the PPO demonstration, in 2003, CMS offered to pay demonstration plans the higher of the regular M+C capitated county rate or 99 percent of the Medicare FFS payment rate. If this incentive was effective in inducing plan entry, one would expect to see greater entry in counties where the demonstration payment rate was higher than the usual M+C rate. But as ***Table ES-3*** indicates, the rate of PPO entry in counties where demonstration payment was higher than the regular M+C amount was almost the same as in counties where it was not—about 7 percent in both types of counties. The rate of PPO entry was much higher in urban (metropolitan) counties, but was roughly the same in counties with and without the higher demonstration payment rate in both urban and rural areas. The multivariate analysis reached the same conclusion: the higher demonstration payment rate had no systematic impact on PPO entry. It may be that the extra payments were simply too small to be effective or they were viewed as transitory by health plans. The MMA subsequently raised payments in 2004 for all MA plans to at least 100 percent of FFS per capita costs, eliminating the demonstration payment differential.

**Figure ES-2**
**Distribution of PPO and CCP counties by urbanicity**




NOTE: PPO is PPO demonstration plan. CCP is coordinated care plan. Excludes Part B only and employer-only plans.
SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table ES-2**
**Number of other coordinated care choices (contracts) in PPO service area counties[1]**
**Percent of PPO service area beneficiaries and counties with specified number of other choices**

| Other choices | Beneficiaries | Counties |
|---|---|---|
| None | 5.1% | 9.5% |
| One | 20.1 | 32.4 |
| Two | 21.7 | 29.7 |
| Three | 20.0 | 14.0 |
| Four | 14.0 | 10.4 |
| Five or more | 19.0 | 4.1 |

NOTES:

[1] Includes Part A and Part B plans and beneficiaries only. Excludes employer-only plans. PPO is PPO demonstration plans.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table ES-3**
**Percent of counties with a PPO by county payment rate[1]**

| | Counties with higher demonstration payment rate[2] | |
|---|---|---|
| Counties | Yes | No |
| All | 7.4% | 7.0% |
| Metropolitan | 18.3 | 16.3 |
| Nonmetropolitan | 1.8 | 2.0 |

NOTES:

[1] Excludes employer-only plans. PPO is PPO demonstration plans.

[2] CMS offered PPO demonstration plans the higher of the usual county payment rate or fee-for-service per capita costs.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

*In multivariate analysis, the most powerful predictor of PPO plan entry is greater existing managed care presence in a market area.*

To supplement the descriptive analyses, a multivariate analysis of plan market entry was conducted. The dependent variable in the regression was a binary variable indicating whether or not any PPO demonstration plan was available to Medicare beneficiaries in a county. Findings from this model suggest that the most powerful predictors of PPO entry were related to the existing managed care plans present in the area. PPOs were most likely to enter counties with higher commercial PPO or HMO market penetration, and with greater Medicare managed care penetration and a larger number of Medicare managed care contracts. Counties in metropolitan areas, especially large ones, were more likely to attract entry. As was found in the descriptive analysis, although PPOs were more likely to enter counties with higher Medicare payment rates for all plans, the higher incremental demonstration payment rate had little impact on predicted PPO entry.

**Summary of Findings on PPO Plan Offerings**

*PPO monthly premiums are generally higher than competing CCP options, but lower than the most popular Medigap plan.*

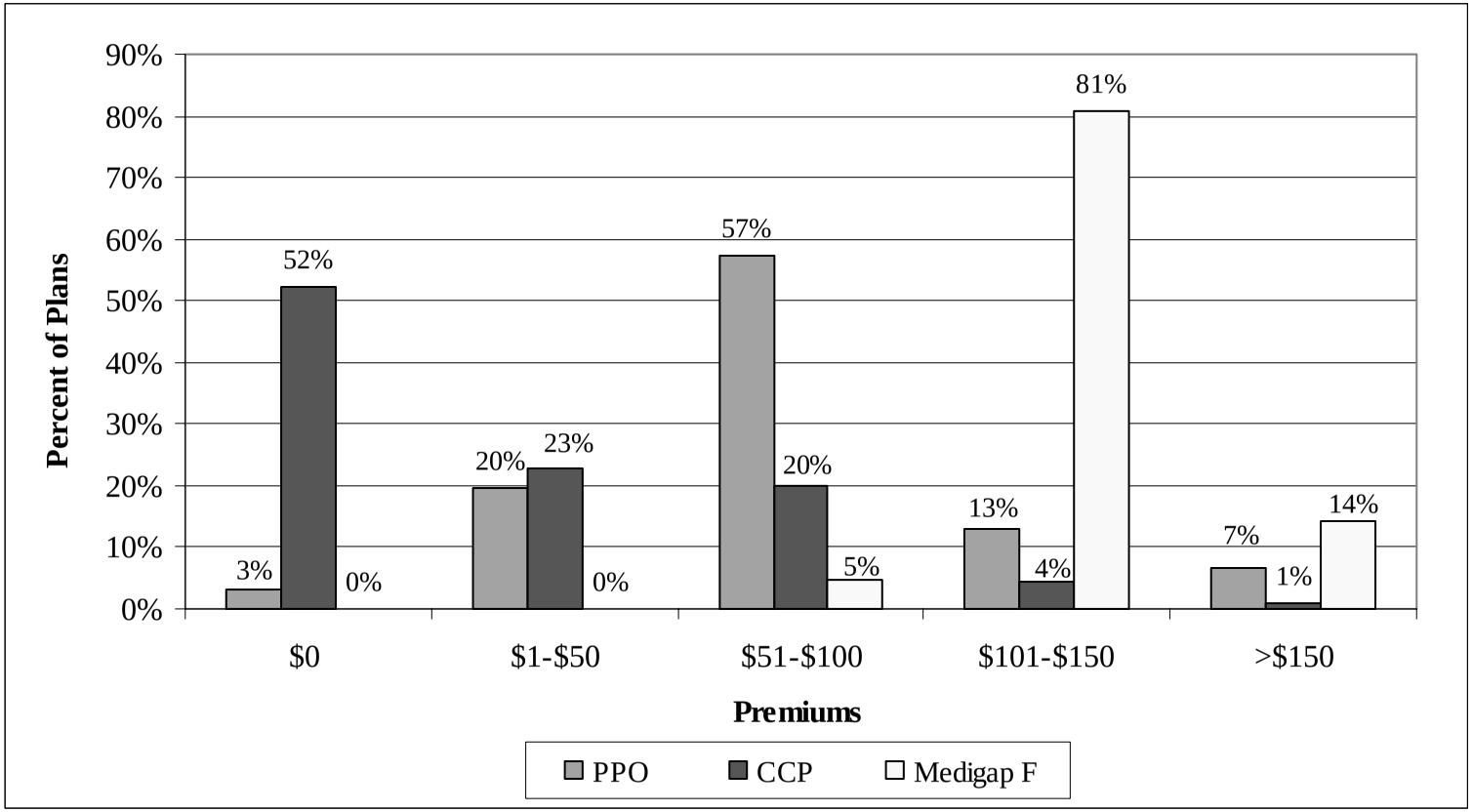
***Figure ES-3*** depicts the distribution of monthly premiums for PPOs and competing CCP and Medigap F plans.[8] PPO premiums range from $0 to $227, but over half are between $51 and $100. On average, PPOs charge more than twice as much as competing CCPs, $76 versus $29. About half of competing CCPs have no monthly premium, whereas all but two of 61 PPO plans charge a monthly premium. Consequently, the typical (median) PPO premium is $69 per month, whereas the typical competing CCP does not charge a premium. PPOs charge about $50 less than Medigap F, which usually costs between $101 and $150 per month. In sum, PPOs are a midrange product, costing more than HMOs because of PPOs' out-of-network coverage, but less than Medigap because PPOs impose greater beneficiary cost sharing, especially for out-of-network providers.

*PPOs are more likely than competing CCPs to provide some coverage for prescription drugs; but among plans with a drug benefit, PPO coverage is less generous on average.*

As shown in ***Table ES-4***, most PPO plans offer an outpatient prescription drug benefit (82 percent of plans, and 91 percent of contracts offer at least one plan with a drug benefit). PPOs are more likely than competing CCPs to offer a drug benefit (82 versus 70 percent). However, when offered, the PPO drug benefit is less generous on average than that of competing CCPs. Only 42 percent of PPO drug benefits cover brand drugs, compared with 53 percent of CCP benefits. Of plans covering generics only, about one third of PPO plans offer unlimited generics, compared with about two thirds of CCPs—when there is a maximum, it is typically $500 in PPO plans compared with $800 in CCPs. The typical brand-only annualized maximum

[8] Medigap plan F was selected for comparison because it is the most popular of the standardized Medigap plans, with 37 percent of enrollment in these plans (MedPAC, 2003). Medigap F covers most Medicare cost sharing but has no prescription drug benefit.

**Figure ES-3**
**PPO, and competing CCP and Medigap Plan F monthly premiums**




NOTE: PPO is PPO demonstration plan. CCP is coordinated care plan. Excludes Part B only and employer-only plans. Competing plans are available in at least one PPO service area county.

SOURCE: RTI analysis of CMS HPMS April 2004 file and AARP Medigap premiums.

**Table ES-4**
**Prescription drug benefits of PPOs and competing coordinated care plans[1]**

| | PPO | CCP |
|---|---|---|
| % of contracts with drug benefit | 91% | 79% |
| % of plans with drug benefit | 82% | 70% |
| Plans with a drug benefit | | |
| Generic coverage only | 58% | 47% |
| Unlimited | 20% | 31% |
| Maximum benefit | 38% | 16% |
| Median annualized maximum | $500 | $800 |
| Brand drug coverage | 42% | 53% |
| Unlimited | 6% | 6% |
| Brand benefit maximum, unlimited generics | 22% | 29% |
| Median annualized maximum | $600 | $900 |
| Brand and generic combination maximum | 14% | 19% |
| Median annualized maximum | $1,000 | $1,000 |

NOTES:

[1] Includes "Part A and Part B" plans only. Employer-only plans are excluded. PPO is PPO demonstration plans. Competing CCPs are defined by those offered in at least one PPO service area county.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

in PPO plans is $600 compared with $900 in CCPs. Including both plans that do and do not offer a drug benefit, the simulated average annual value of PPOs' drug benefits slightly exceeds the value of CCPs' benefits; for example, $485 (PPO) versus $460 (CCP) for beneficiaries aged 70-74 in poor health.

*All demonstration PPOs cover a core set of benefits out of network. A lower proportion of PPOs than competing CCPs provide vision, hearing, and dental benefits in-network.*

As shown in ***Table ES-5***, PPOs offer much more extensive out-of-network benefits than competing CCPs, few of which offer any out-of-network coverage. Out-of-network benefits are the major distinction between PPOs and HMOs. In contract year 2004, all demonstration plans cover a core set of services out of network, including acute hospitalizations, outpatient hospital services, and primary care and specialist physicians. Other standard Medicare benefits—such as skilled nursing facility stays, home health visits, and durable medical equipment—are covered by most, but not all, demonstration plans out of network.[9] When describing the limitations on their

[9] The United States Government Accountability Office (GAO) has noted that according to demonstration PPOs' contracts, they should be required to provide all covered benefits out of network (GAO, 2004). CMS agreed with GAO's recommendation and is working with demonstration plans to make all covered benefits available out of network in contract year 2005.

out-of-network benefits in the site-visit interviews,, some demonstration plans characterized themselves as "not true PPOs" but "point-of-service plans," or "HMOs with an out-of-network benefit."

**Table ES-5**
**Benefits of PPOs and competing coordinated care plans[1]**
**Percentage of plans covering selected services in- and out-of-network**

| | PPO | CCP |
|---|---|---|
| I. Out-of-network | | |
| Inpatient hospital—acute | 100.0% | 2.6% |
| Outpatient hospital | 100.0 | 2.6 |
| Physician, primary care and specialist | 100.0 | 2.6 |
| Ambulatory surgery center | 100.0 | 2.6 |
| Skilled nursing facility—Medicare benefit | 77.0 | 2.6 |
| Home health | 73.8 | 2.6 |
| Durable medical equipment | 85.2 | 2.6 |
| Inpatient psychiatric hospital | 82.0 | 2.6 |
| Outpatient mental health[2] | 86.9 | 2.6 |
| Outpatient rehabilitation services[3] | 91.8 | 2.6 |
| II. In-network | | |
| Dental | 32.8 | 43.1 |
| Eye wear | 50.8 | 75.0 |
| Hearing aids | 23.0 | 55.6 |

NOTES:

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plans. Competing CCP plans are defined by those offered in at least one PPO service area county.

[2] Psychiatric/non-psychiatric.

[3] Physical, speech/language, occupational therapy.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

A lower proportion of PPOs than competing CCPs provide the following supplemental benefits: vision, hearing, and dental benefits in network (Table ES-5). For example, less than one quarter of PPOs cover hearing aids compared with over half of competing CCPs. Offering rich benefits in addition to their out-of-network coverage does not appear to be part of PPOs' strategy to attract enrollees. Instead, they may be restraining other benefits to keep premiums down or fund the costs associated with their out-of-network benefit.

*Unlike competing CCPs, few PPOs require referrals to see physician specialists; but PPO physician networks are not larger than the networks of competing CCPs.*

PPOs provide less restrictive access to network physician specialists than CCPs. According to CMS data, 72 percent require referrals for a specialist visit compared with only 10 percent of PPOs. PPOs do not provide enrollees with access to a larger network of physicians. ***Table ES-6*** displays the distribution of PPO and competing CCPs by their network size. The

distributions are similar, with no evidence of larger PPO networks. The median network size category is slightly smaller for PPOs than for competing CCPs: 1,001 to 1,500 physicians versus 1,501 to 2,000 physicians. PPO and CCP network sizes may be similar because many managed care organizations in the PPO demonstration used the established networks of their HMO plans to create their PPO networks (Greenwald et al., 2004). As enrollment in PPOs grows, the size of their networks may increase.

**Table ES-6**
**Distribution of PPOs and competing CCPs by physician network size[1]**

| Physician network size | PPO | CCP |
|---|---|---|
| < 1,000 | 33.3% | 37.1% |
| 1,001–2,500 | 28.3 | 22.0 |
| 2,501–5,000 | 20.0 | 16.4 |
| 5,000–9,000 | 3.3 | 6.5 |
| 9,001+ | 15.0 | 18.1 |
| Median physician network size[2] | 1,001–1,500 | 1,501–2,000 |

NOTES:

[1] Excludes Part B only and employer-only plans. Competing CCPs are those offered in at least one PPO service area county. PPO is PPO demonstration plans.

[2] Physician network size is reported in a larger number of categories (ranges) than the aggregated categories shown in the table.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

*In-network PPO cost sharing is considerably lower than in original Medicare FFS, and for inpatient services, lower than in competing CCPs.*

***Table ES-7*** shows typical (median) cost sharing for selected services for PPOs (in network and out of network), competing CCPs, and original Medicare FFS. Beneficiary out of pocket costs for each plan have been simulated by CMS and its contractor Fu Associates from utilization profiles developed from the Medicare Current Beneficiary Survey and plan cost sharing rules such as are reflected in Table ES-8 (Fu Associates, 2004). ***Table ES-8*** displays the predicted in-network monthly out-of-pocket cost sharing by plan type for selected services for a beneficiary aged 70-74 in poor health. PPO and CCP cost sharing is much less than FFS for all these services except prescription drugs, where it is about 10 percent less. PPO cost sharing is less than in CCPs, especially for inpatient hospital.

**Table ES-7**
**Cost sharing in PPOs, competing coordinated care plans, and Medicare fee-for-service[1]**
**Typical (median) co-payment ($), coinsurance (%), or deductible ($) for selected services**

| | PPO | | CCP | FFS |
|---|---|---|---|---|
| Service | In-network | Out-of-network | | |
| Primary care physician visit | | | | |
| Co-payment | $10 | rare | $10 | -- |
| Coinsurance | -- | 20% | -- | 20% |
| Specialist physician visit | | | | |
| Co-payment | $20 | rare | $20 | -- |
| Coinsurance | -- | 20% | -- | 20% |
| Hospital inpatient stay | | | | |
| Co-payment per day[2] | $100 | rare | $175 | -- |
| Co-payment per stay | $250 | $750 | $250 | $876[3] |
| Coinsurance | Rare | 20% | rare | -- |
| No cost sharing (% of plans) | 13% | 0% | 19% | -- |
| Hospital outpatient | | | | |
| Co-payment per visit[4] | $50 | rare | $50–100 | -- |
| Coinsurance | 10% | 20% | 20% | 20% |
| No cost sharing (% of plans) | 33% | 0% | 29% | -- |
| Global deductible | rare | $250 | rare | $110 (Part B) |
| Prescription drugs[5] | | | | |
| Generic-only drug tiers | $10 | — | $10 | -- |
| Some or all brand drug tiers | $37.50 | — | $30 | -- |

NOTES:

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plans. Competing CCP plans are defined by those offered in at least one PPO service area county. FFS is original Medicare fee-for-service.

[2] Co-payments per day are often limited to the first days of a stay, for example, the first five days. Co-payments may vary for different days of a stay.

[3] Initial deductible per benefit period. Beyond day 60, additional cost sharing applies.

[4] Co-payments vary across outpatient services. For CCPs, the median minimum co-payment is $50 and the median maximum co-payment is $100.

[5] 30-day supply at designated retail pharmacy.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table ES-8**
**Predicted average monthly out-of-pocket costs for selected services, by plan type[1]**
**Beneficiary in poor health aged 70 to 74**

| Service | PPO | CCP | FFS |
|---|---|---|---|
| Physician, primary care | $5.16 | $5.28 | $9.48 |
| Physician, specialist | 13.01 | 16.14 | 34.34 |
| Hospital, inpatient, acute | 45.74 | 72.34 | 149.73 |
| Hospital, outpatient[2] | 3.33 | 4.17 | 13.28 |
| Prescription drugs | 357.58 | 359.70 | 398.01 |

[1] PPO is PPO demonstration plans. CCP is competing coordinated care plans. FFS is original Medicare fee-for-service. Assumes in-network PPO cost sharing levels. Plan type costs are unweighted averages across plans of a given type. Excludes institutionalized beneficiaries.

[2] Includes ambulatory surgery center.

SOURCE: RTI analysis of CMS 2004 out-of-pocket cost data.

*Although a higher percentage of PPOs than competing CCPs have global in-network out of pocket maximums, most PPOs do not have global out-of-pocket maximums.*

Out-of-pocket maximums can play an important role in limiting total enrollee financial risk and the out-of-pocket costs of sicker enrollees. ***Table ES-9*** presents in-network and out-of-network global out-of-pocket maximums for PPOs and competing CCPs. Of PPO plans, 39 percent have an in-network global out-of-pocket maximum, and 23 percent have an out-of-network global out-of-pocket maximum.[10] Among PPOs that have a maximum, the in-network global out-of-pocket maximum is typically about $1,800. The out-of-network global out-of-pocket maximum is typically about $3,250, when it exists. A smaller percentage of competing CCPs than PPOs offer an in-network global out-of-pocket maximum (30 versus 39 percent), and it is typically somewhat greater when it exists ($2,560 versus $1,800). Very few CCPs offer any out-of-network coverage. MMA requires the new regional PPOs to have a global out-of-pocket maximum.

[10] Another 13 percent of PPOs (and 18 percent of competing CCPs) have in-network inpatient-only out-of-pocket cost maximums.

**Table ES-9**
**PPO and competing CCP enrollee global out-of-pocket cost maximums[1,2,3]**

| | In-network | | Out-of-network |
|---|---|---|---|
| | PPO | CCP | PPO |
| Percentage of plans with maximum | 39% | 30% | 23% |
| Range across plans | | | |
| Maximum | $5,000 | $5,000 | $5,000 |
| Median | 1,800 | 2,560 | 3,250 |
| Minimum | 800 | 500 | 2,400 |

NOTES:

[1] Excludes Part B only and employer-only plans. Competing CCPs are those offered in at least one PPO service area county. PPO is PPO demonstration plans.

[2] Out-of-pocket maximums have been annualized.

[3] Maximums may cover a varying list of services across plans. Inpatient-only maximums are not included in this table.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

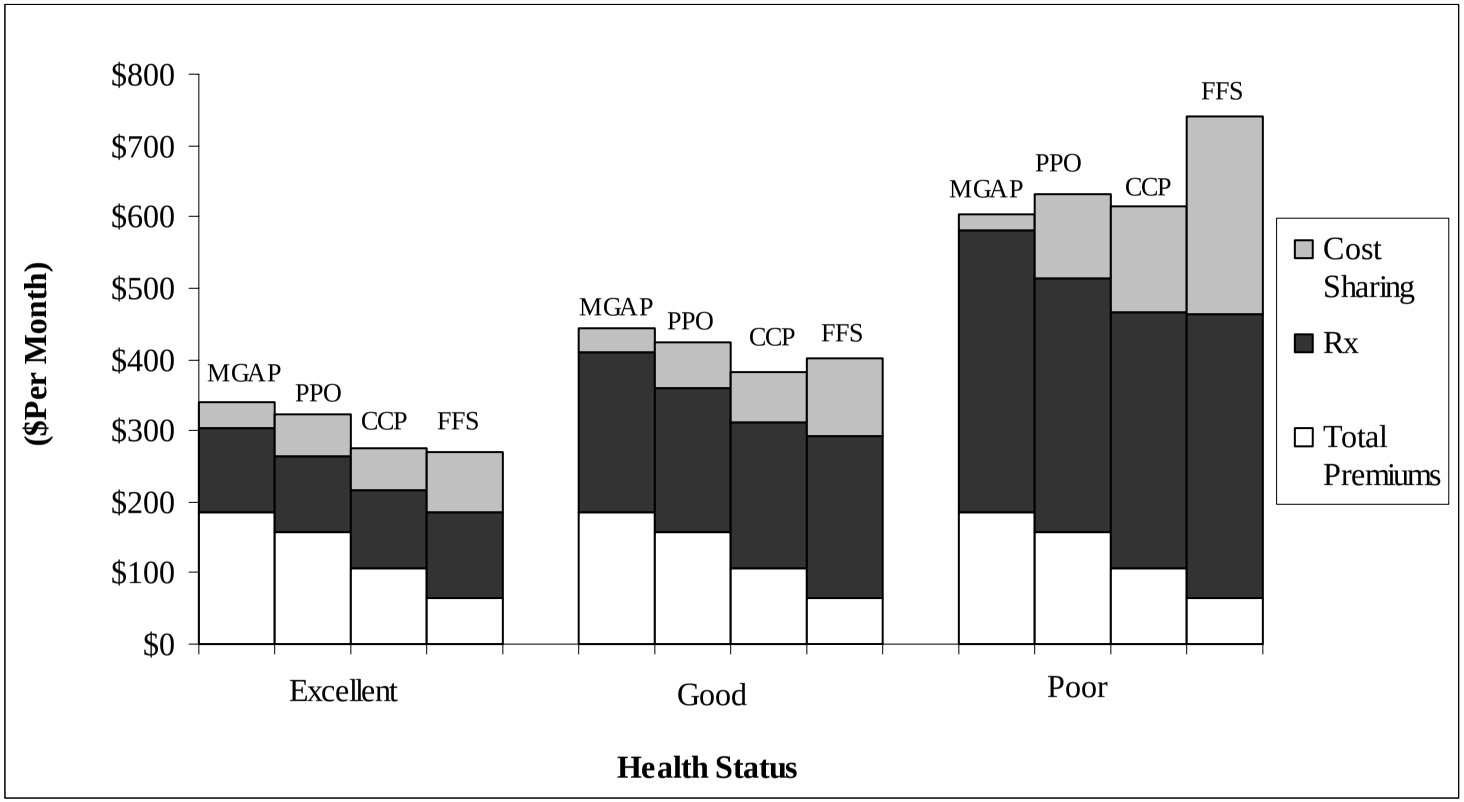
*Enrollees in demonstration PPOs have higher predicted total out-of-pocket costs than enrollees in competing CCPs at all health status levels, but the difference narrows as health declines. PPOs (and CCPs) provide better financial protection as health deteriorates than FFS Medicare, but less protection than FFS supplemented with the most popular Medigap plan.*

***Figure ES-4*** presents simulated total out-of-pocket costs by plan type for enrollees in excellent, good, and poor health, aged 70–74.[11,12] Total out-of-pocket costs include premiums (Part B and health plan), prescription drug expenses (assuming no drug coverage beyond what is offered by the health plan), and cost sharing (including expenses for noncovered services). In-network cost-sharing levels are assumed. Plan types are demonstration PPOs, competing CCPs, original Medicare FFS, and original Medicare plus competing Medigap plan F. Plan type costs are unweighted averages across plans of a given type; for example, an average of the 61 PPO demonstration plans.

[11] These simulations were done by Fu Associates under contract to CMS (Fu Associates, 2004). Out of pocket costs excludes long-term-care expenditures.

[12] In general, relative costs by health plan and health status do not appear very sensitive to the age range chosen. However, to the extent that Medigap premiums are age-rated, Medigap will be relatively less expensive for younger beneficiaries and relatively more expensive for older beneficiaries.

**Figure ES-4**
**Predicted out-of-pocket cost by plan type: Beneficiaries aged 70–74**




NOTE: PPO is PPO demonstration plan. MGAP is competing Medigap Plan F. CCP is competing coordinated care plan. Rx is prescription drug costs. Total Premiums includes health plan and Medicare Part B premiums. Cost sharing includes costs for noncovered services. Assumes in-network cost-sharing levels. Plan type costs are unweighted averages across plans of a given type. Excludes institutionalized beneficiaries.

SOURCE: RTI analysis of CMS 2004 out-of-pocket cost data.

As shown in Figure ES-4, a beneficiary can expect to have higher total out-of-pocket costs in a PPO than in a competing CCP at each health status level, due to the higher PPO premium. This is true even if no out-of-network providers are patronized. But the difference between PPOs and CCPs narrows as health worsens because of lower PPO cost sharing for inpatient services. PPOs, of course, offer an out–of-network benefit that CCPs lack, which is a reason for the higher PPO premium.

PPOs (and CCPs) occupy an intermediate position between FFS and Medigap in terms of out-of-pocket costs and risk protection. PPOs are less expensive than Medigap F for beneficiaries in excellent and good health status, but more expensive for beneficiaries in poor health status. PPO premiums and drug costs are lower than Medigap's at each health status level, but cost sharing is higher and grows more rapidly, even if only in-network providers are used. On the other hand, PPOs are more expensive than FFS for excellent and good health statuses, but less expensive for poor health status. PPO premiums are always higher, but drug costs and cost sharing are lower and grow less rapidly as health and utilization worsens, gradually offsetting higher PPO premiums. PPOs expose enrollees to more financial risk than Medigap F (a difference in total out-of-pocket costs between excellent and poor health statuses of $310 versus $265 for Medigap), but less than FFS ($310 versus $472).

**Summary of Findings on Enrollment in PPOs**

Enrollment in Medicare PPOs reflects beneficiary's response to the availability and attractiveness of this relatively new product. In general, enrollment in the demonstration PPOs have been somewhat lower than plans' expectations, but steadily increasing.

*Most of the initial enrollment in the PPO demonstration was in a single contract, Horizon Healthcare of New Jersey. Non-Horizon enrollment has grown steadily and now accounts for more than half of total demonstration enrollment of about 105,000 beneficiaries. Enrollment in many demonstration contracts remains quite small.*

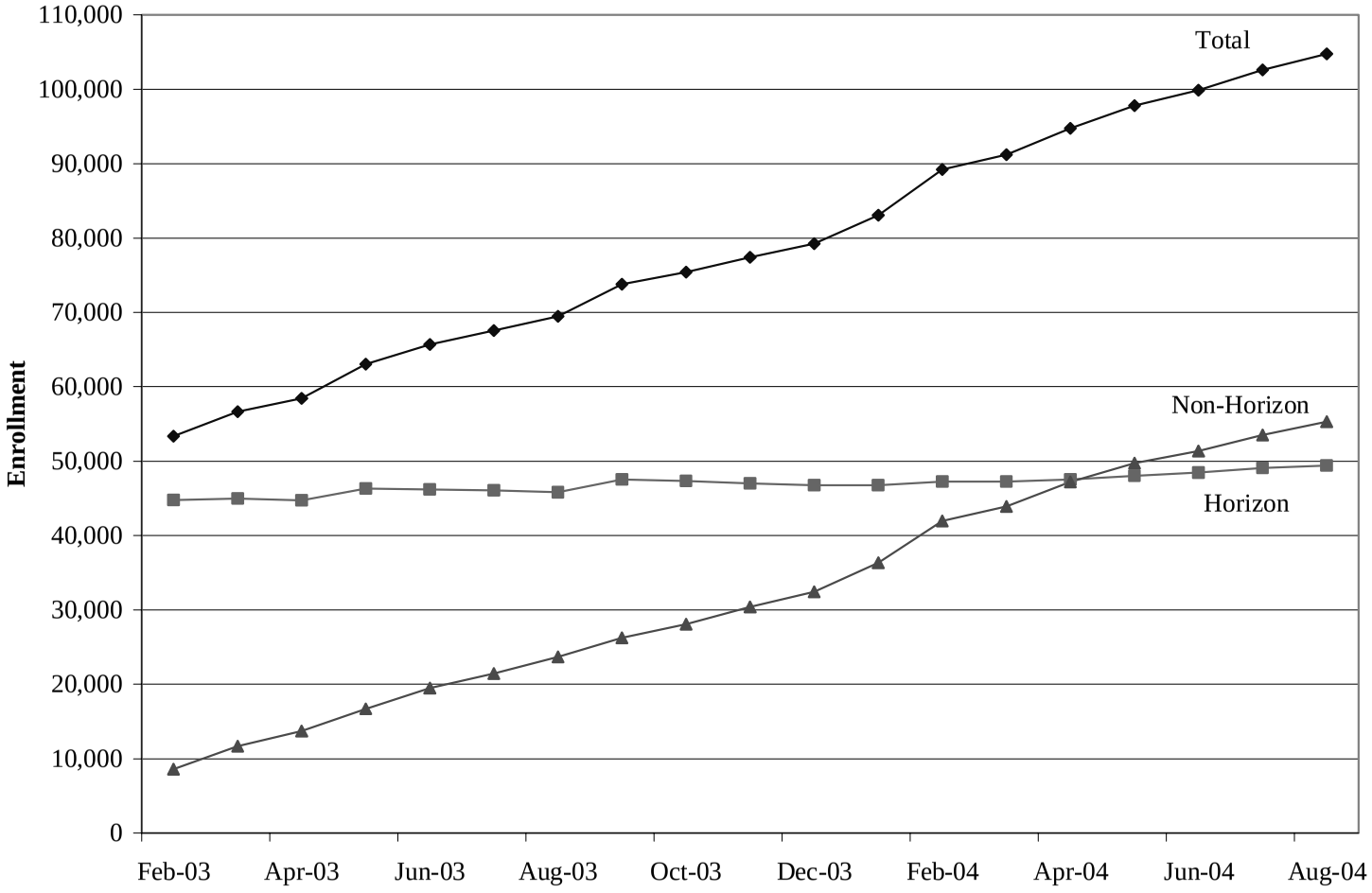
***Figure ES-5*** depicts enrollment in the PPO demonstration from its inception in January 2003 through August 2004.[13] Beginning enrollment in the demonstration was about 53,000, most of which was due to the Horizon Healthcare of New Jersey contract (about 45,000 of the 53,000). Almost all of the initial Horizon enrollees transferred from a 2002 Horizon HMO product whose benefits were reduced for 2003. For this reason, initial Horizon demonstration enrollment is more of a continuation of the earlier HMO enrollment than new enrollment attracted to a PPO product.[14]

The other 30 demonstration contracts effective January 1, 2003, accounted for fewer than 9,000 enrollees initially, an average of less than 300 per contract. Enrollment in the Horizon contract grew only slightly through the first 20 months of the demonstration. Enrollment in the non-Horizon contracts grew more rapidly, in total surpassing Horizon by summer 2004. By that

[13] The CMS Geographic Service Area file data do not fully reflect initial PPO enrollment until February 2003, so Figure ES-5 begins in February 2003 rather than January.

[14] Horizon does not describe their demonstration product as a PPO, but rather as a Point of Service plan, or an HMO with an out-of-network benefit option. See Chapter 2 for further discussion of Horizon.

**Figure ES-5**
**Enrollment in PPO demonstration**




SOURCE: RTI analysis of CMS Geographic Service Area file.

time, there were 34 non-Horizon demonstration contracts—two new contracts became effective September 1, 2003, and an additional two new contracts were effective January 1, 2004. By August 2004, total demonstration enrollment was nearly 105,000, with slightly more enrollees in non-Horizon than Horizon contracts. The growth in non-Horizon enrollment has been steady at about the same rate throughout the demonstration, with the exception of a noticeable upward tick in early 2004 associated with the annual open enrollment period. Lower premiums and/or enhanced benefits resulting from higher MMA-required Medicare payments to health plans—which took effect in April 2004—did not result in a noticeably higher rate of demonstration enrollment growth.

As of August 2004, average enrollment per PPO demonstration contract, excluding Horizon, was 1,627 beneficiaries. Nearly half (15 of 34) of the demonstration contracts had small enrollments of fewer than 500 beneficiaries. Over half of total demonstration enrollment, and one quarter excluding Horizon, was in New Jersey, where the Horizon and Aetna demonstration plans account for the majority of an overall low Medicare health plan enrollment.

*The enrollment market share for PPOs in their service areas is 1 percent of all beneficiaries and 5 percent of Medicare health plan enrollees.*

***Table ES-10*** presents the PPOs' enrollment market share for various groups of beneficiaries residing in counties of PPO demonstration contracts as of March 2004. PPOs accounted for 1 percent of Medicare enrollment in their service area counties and 5 percent of total Medicare health plan enrollment. PPOs' low 1 percent share of beneficiaries recently enrolling in the Medicare program is perhaps surprising because, given PPOs' large commercial market share, many new beneficiaries presumably have prior experience with employer-sponsored PPOs. Of new beneficiaries enrolled in a health plan in March 2004, 8 percent chose a PPO, higher than PPOs' 5 percent share of overall health plan enrollment. Of beneficiaries enrolled in March 2004 who had switched from FFS to a health plan, or from one health plan to another, 13 percent enrolled in a PPO, indicating a modest potential for PPOs to continue to gain market share.[15]

*Of PPO enrollees, 42 percent were previously in FFS Medicare, 43 percent were previously in another Medicare health plan, and 15 percent are recent enrollees in the Medicare program. These proportions are similar to competing CCPs.*

***Table ES-11*** presents the prior enrollment status of PPO enrollees and recent enrollees in competing CCPs as of March 2004 in demonstration service areas. Enrollees in the Horizon PPO demonstration who were previously enrolled in the Horizon HMO are excluded from these data.[16] There was some expectation that PPOs would be more attractive to FFS beneficiaries

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[15] Enrollment market share, like the other beneficiary data, does not include beneficiaries who died or moved out of the combined PPO service areas before March 2004.

[16] Because the Horizon PPO demonstration plan replaced the Horizon HMO, its enrollment is more of a continuation of previous HMO enrollment than movement from an HMO to a PPO. Given that Horizon accounted for roughly half of demonstration enrollment in March 2004, including Horizon would disproportionately affect the results. See Chapter 2 for further discussion of Horizon.

**Table ES-10**
**PPO enrollment market shares, combined PPO service areas[1]**

| Selected beneficiary groups | PPO share |
|---|---|
| Total Medicare enrollees | 1.0% |
| Health plan enrollees | 4.6 |
| Coordinated care plan enrollees | 5.0 |
| Recent Medicare program enrollees[2] | 1.0 |
| Recent Medicare program enrollees enrolling in a health plan | 8.2 |
| Beneficiaries who switched from FFS to a health plan[3] | 13.0 |
| Beneficiaries who switched from a health plan to another health plan[3,4] | 13.0 |

NOTES:

[1] Includes beneficiaries with Part A and Part B coverage and residing in the open enrollment service area counties of any PPO demonstration contract as of March 2004.

[2] Includes beneficiaries who enrolled in the Medicare program January 1, 2003 or after.

[3] Includes beneficiaries who were Medicare-enrolled since January 1, 2003, but changed their plan status as indicated since that time.

[4] Excludes beneficiaries who switched from the Horizon New Jersey HMO to the Horizon PPO demonstration contract.

SOURCE: RTI analysis of March 28, 2004 Medicare Enrollment Database.

**Table ES-11**
**Prior enrollment status of PPO and recent CCP enrollees [1,2]**

| | Current enrollment | |
|---|---|---|
| Prior enrollment | PPO | CCP |
| Recent Medicare enrollee[3] | 14.8% | 23.4% |
| Fee-for-service Medicare | 41.9 | 39.2 |
| Medicare health plan | 43.4 | 37.4 |
| Unaffiliated[4] | 27.8 | — |
| Affiliated[5] | 15.5 | — |

NOTES:

[1] Includes beneficiaries with Part A and Part B coverage as of March 2004, residing in the open enrollment service area counties of any PPO demonstration contract.

[2] Includes beneficiaries who enrolled in their current plan January 1, 2003 or after. Excludes Horizon PPO demonstration enrollees previously enrolled in the Horizon HMO.

[3] Beneficiaries who newly enrolled in the Medicare program January 2003 or after.

[4] Prior plan has a different parent company than the current plan.

[5] Prior plan has the same parent company as the current plan.

SOURCE: RTI analysis of the March 28, 2004 Medicare Enrollment Database.

than other CCPs (mostly HMOs) because of PPOs' greater freedom of provider choice. But PPOs drew about the same proportion of their enrollees from FFS as CCPs. Also, compared with CCPs, PPOs drew a somewhat lower proportion of their enrollees from recent Medicare enrollees (beneficiaries new to the Medicare program during the demonstration period), which is not consistent with the hypothesis that PPOs are especially attractive to Medicare "age ins"—those joining the program when they become eligible at age 65.

Among PPO enrollees previously in other health plans, about two thirds (64 percent) were previously enrolled in unaffiliated plans and about one third (36 percent) were previously enrolled in affiliated plans. An affiliated plan is a plan (typically an HMO) offered in the same market area by the same parent company that is sponsoring the demonstration PPO. For example, a United Healthcare Medicare HMO offered in the same service area as the United demonstration PPO. Thus, the demonstration PPOs are not simply siphoning from affiliated HMO enrollment—only about 15 percent of total PPO enrollment came from this source. Of course, if the beneficiaries who transferred from Horizon's HMO to its PPO demonstration contract were included as enrollees from an affiliated HMO, the proportion of demonstration enrollees drawn from an affiliated health plan would be much greater.

*The demographic and health status characteristics of PPO enrollees were similar to those of recent enrollees in competing CCPs, except that PPOs enrolled fewer blacks and other minorities and fewer Medicaid recipients. Like other CCPs, PPOs are experiencing favorable selection relative to Medicare FFS.*

***Table ES-12*** presents demographic and health status characteristics of PPO and competing CCP enrollees as of March 2004. The age distribution of PPO enrollees was generally similar to recent enrollees of competing CCP enrollees. A slightly lower percentage of PPO than CCP enrollees were aged 65-69, and a slightly higher percentage were aged 70-74 and aged 75-84. This is consistent with the finding that PPOs are not capturing a disproportionate share of the new Medicare enrollee or age-in market.[17] PPOs seem to be relatively more popular among the midrange elderly, aged 70-84. Of all PPO enrollees, 6 percent were the "oldest old," aged 85 or older; a share equal to recent CCP enrollees. The share of enrollees younger than age 65, most of whom are entitled by disability, was nearly the same among PPO and recent CCP enrollees. This is not consistent with the hypothesis that PPOs are especially attractive to disabled beneficiaries who may have difficulty obtaining Medigap supplemental coverage but want to avoid the provider access restrictions of HMOs. A smaller share of PPO enrollees than recent enrollees in competing CCPs were blacks and other minorities, and were on Medicaid. This may be related to the higher monthly premiums for PPOs and lower incomes among blacks and Medicaid recipients.

[17] A major source of Medicare health plan enrollment among 65-69 year olds is age-ins enrolling directly from an employer group plan. Though some PPO demonstration plans may have such arrangements, existing CCPs probably have an advantage in enrolling this segment of Medicare beneficiaries.

**Table ES-12**
**Characteristics of PPO and recent[1] coordinated care plan enrollees[2]**

| | PPO | CCP |
|---|---|---|
| Age | | |
| < 65 | 11.7% | 12.7% |
| 65–69 | 31.8 | 38.9 |
| 70–74 | 23.7 | 18.8 |
| 75–84 | 26.7 | 23.4 |
| 85+ | 6.2 | 6.2 |
| Race | | |
| White | 90.9% | 82.0% |
| Black | 6.4 | 13.2 |
| Other/unknown | 2.7 | 4.8 |
| Medicaid status | | |
| Not enrolled | 97.7% | 92.1% |
| Enrolled | 2.3 | 7.9 |
| Health Status Risk Score[3] | | |
| All enrollees[4] (fee-for-service = 1.11) | 0.95 | 0.96 |
| All recent enrollees[5] | 0.93 | 0.87 |
| Recent Medicare enrollees[6] | 0.58 | 0.56 |
| Switchers[7] | 0.99 | 0.97 |

NOTES:

[1] Beneficiaries enrolling in their current CCP on or after 1/1/2003.

[2] Includes beneficiaries with Part A and Part B coverage as of March 2004, residing in any PPO demonstration open-enrollment service area county.

[3] CMS-HCC risk score.

[4] Includes all current enrollees, experienced as well as recent.

[5] Beneficiaries enrolling in their plan January 2003 or after. For PPOs, excludes Horizon enrollees previously enrolled in Horizon's HMO.

[6] Beneficiaries who newly enrolled in the Medicare program January 2003 or after.

[7] Beneficiaries who switched into their current Medicare plan (including from one Medicare health plan contract to another) since January 2003.

SOURCE: RTI analysis of CMS enrollment and risk score data.

The average health status of PPO and competing CCP enrollees was virtually the same (0.95 risk score for PPOs versus 0.96 for CCPs).[18] PPOs were not attracting sicker beneficiaries than CCPs, despite the potential attractiveness of their out-of-network benefit to beneficiaries using many health services. But Medicare health plan enrollees—both PPO and CCP—are healthier on average than PPO service area enrollees in Medicare FFS, who have a mean risk score of 1.11. Beneficiaries switching into PPOs or CCPs from FFS or other health plans have almost identical mean risk scores, as do new Medicare beneficiaries enrolling in either PPOs or CCPs. Because new beneficiaries, who have much lower average risk scores, comprised a larger proportion of recent CCP than PPO enrollment, overall, recent enrollees in CCPs were slightly healthier. In sum, the average health status of PPO and CCP enrollees was very similar, and both plans were experiencing favorable selection relative to Medicare FFS. PPOs, of course, are start-up plans, and it is possible that the average health status of their enrollees will decline over time as the tenure of their enrollees increases.

*The voluntary disenrollment rate among all PPO demonstration enrollees is similar to the rate among competing CCP enrollees. However, excluding continuing enrollees in the Horizon demonstration plan, PPO disenrollment is modestly higher than disenrollment among recent enrollees in competing CCPs.*

Among all PPO enrollees in plans effective January 2003, the 18-month (January 2003 through June 2004) voluntary disenrollment rate was 12.3 percent, slightly lower than the 13.1 percent rate among all competing CCP enrollees over the same period. But when enrollees continuing from the Horizon HMO to the Horizon PPO demonstration contract are excluded, the PPO disenrollment rate rises to 15.0 percent. The comparable CCP rate, restricted to CCP enrollees with enrollment spells beginning during the demonstration period, remains at 13.1 percent. This is weak evidence of a higher voluntary disenrollment rate in PPOs than competing CCPs, which could indicate slightly greater dissatisfaction among PPO than recent CCP enrollees. To the extent the observed difference is meaningful, it could arise from the newness of Medicare PPOs, which might create misunderstanding and unfulfilled expectations among some beneficiaries, and early operational difficulties with providers. For example, in the site-visit interviews (Greenwald et al., 2004), demonstration PPOs indicated that some disenrollment had occurred due to the unwillingness of some providers to accept PPO out-of-network benefits. Demonstration PPOs also stressed how little potential enrollees knew about the PPO model. As PPOs mature, their disenrollment patterns could change. Two surveys—RTI's survey of PPO and comparison enrollees as part of this project and the CMS-sponsored survey of managed care disenrollees—will provide more information on beneficiary satisfaction and reasons for disenrollment.

## Conclusions

Considering the tight time frame for its implementation, the PPO demonstration has succeeded in making a new managed care option available to a significant proportion of Medicare beneficiaries, though mostly in urban or near-urban areas where other managed care options already exist. The premiums of plans offered by the demonstration PPOs tend to be more costly than competing CCPs, but less costly than popular Medigap options. Therefore,

[18] Risk scores indicate predicted future Medicare expenditures relative to the national average of 1.00.

PPOs may represent a reasonable mid-point product for beneficiaries. The benefits offered under PPOs include out-of-network coverage, but at a potentially significant cost. PPO enrollment, although steadily rising, has been limited to date. Plans told us in our site visit interviews that the higher monthly premium cost of PPOs is an important factor limiting PPO enrollment relative to HMOs. Although PPOs have lower premiums than the most popular Medigap option, PPOs expose enrollees to significantly more cost sharing and financial risk, especially if they use out-of-network providers. The forthcoming beneficiary survey will provide more information about beneficiary enrollment decisions.

# SECTION 1
# INTRODUCTION

## 1.1 Background on the Medicare Preferred Provider Organization Demonstration

As Preferred Provider Organizations (PPOs) become the most dominant model of managed health care among employers and other private-sector purchasers, policy makers increasingly view PPOs as an attractive option for Medicare. As part of a larger effort to "modernize" aspects of the Medicare Fee for Service (FFS) and Medicare+Choice (M+C) programs by having them adopt various strategies more widely used in the private sector, the Medicare Modernization Act (MMA) of 2003 includes the introduction of "regional PPOs" as a key component of the next generation of Medicare managed care: Medicare Advantage (MA). By 2006, Medicare options may include PPOs available to all Medicare beneficiaries; not just beneficiaries in select market areas.

Policy makers favor PPOs for a number of reasons. First, PPOs offer a model of managed care that can be perceived as being "between" the traditional FFS and Health Maintenance Organization (HMO) options available to beneficiaries today. Because individuals covered under PPOs generally have access to a wide range of physician choices without gatekeepers and prior approvals, as well as the option to use out-of-network providers (for higher co-payments), it is possible that PPOs will appeal to more Medicare beneficiaries enrolled in FFS who have so far been reluctant to enroll in managed care. Second, the popularity of PPOs in the private sector may provide the spark to ignite more beneficiary interest in the MA program under new MMA legislation.

Interest in PPOs for Medicare is not an entirely new concept. Congress has been interested in providing beneficiaries with additional health care options, including new types of coordinated care options, as demonstrated in passage of key legislations in recent years. One goal of the Balanced Budget Act (BBA) of 1997 in establishing the M+C program was to expand the options and penetration of Medicare managed care, but thus far these policy goals have not been realized. A PPO program as configured in this demonstration may be one step in accomplishing the goals of expanded choice and enrollment in MA.

Despite the nationwide application of the PPO model for Medicare managed care under the MMA legislation and BBA as well, the Medicare program and its beneficiaries actually have limited experience with the PPO model. Defining the characteristics of the PPO model can be difficult, as there are different models operating in the private sector; however, there are some basics. PPOs, in general, are created by contractual arrangements between a financial insurer and an organization of health care providers. Unlike the traditional HMO model, PPOs offer enrollees coverage resembling indemnity insurance, using financial incentives rather than strict provider access restrictions, to channel care to network providers. Because PPO network provider participants are often paid based on discounted or otherwise favorable rates, the PPO model has been attractive for cost containment. Established PPOs may also use other techniques—such as physician profiling, financial and nonfinancial incentives, and quality monitoring programs—to maintain competitive, efficient, and high-quality care.

To better understand how PPOs might operate under the Medicare program, CMS launched the Medicare Preferred Provider Organization (PPO) Demonstration, which began providing services to Medicare beneficiaries on January 1, 2003. The purpose of this project is to evaluate the PPO demonstration. In initiating this demonstration project, CMS has the following policy goals:

- Increase access for Medicare beneficiaries to managed care alternatives to traditional FFS.
- Fulfill the ideals of the M+C program—now termed Medicare Advantage since the passage of the MMA in 2003—by expanding the number and types of managed care products available to Medicare beneficiaries.
- Provide a mix of product options under the M+C and MA programs that more closely mirrors the private sector.

In this report, we examine how PPOs have operated under the demonstration. Our findings are based on a secondary data analysis of the largest group of PPOs to operate under Medicare to date. Based on this CMS-funded evaluation, we will describe the following key features of the Medicare PPO demonstration sites:

- Market Entry: Where are Medicare PPO demonstration products currently offered?
- Medicare Benefits and Beneficiary Costs: What are Medicare PPO premiums, benefits, and cost sharing?
- Enrollments: What are Medicare PPO enrollments to date? What are the characteristics of Medicare beneficiaries who enroll in PPOs?

This information can provide important insight into how the PPO model might look when it becomes a prevalent option offered to Medicare beneficiaries in 2006, providing policy makers with guidance on how to implement new MA policies for PPOs.

## 1.2 Organization of this Report

This secondary data analysis is the third report prepared for this evaluation project. The first report, the "Geographic Service Area Report," was completed in April 2003 and summarized the basic demonstration PPO plan service areas, benefits, and competing coordinated care plans (CCPs). The second report, the "Case Study and Implementation Report," was completed in February 2004 and presented the findings of the case study analysis, based on extensive interviews and site visits with all the PPO demonstration parent companies. Future reports for this project will include an analysis of the PPO demonstration enrollee and nonenrollee survey. This survey recently completed the in-field phase.

In the remainder of this third project report, detailed methods and findings of the analysis of secondary data are presented for the demonstration PPO sites and comparative CCPs. Chapter 2 presents an overview of the data and methods used in the report. Chapter 3 presents the descriptive and multivariate analysis of PPO plan entry. Chapter 4 provides detailed descriptive analysis of plan premiums, benefits, and beneficiary cost sharing and out-of-pocket costs. Chapter 5 contains the descriptive analysis of enrollments and disenrollments in the

demonstration PPOs. Finally, conclusions about the demonstration PPOs to date are presented in Chapter 6.

## 1.3 Terminology

Throughout this report, the Medicare-defined class of coordinated care plans (CCPs)[19] is used as a comparison for PPOs. The vast majority of CCPs are HMOs. All M+C plans, now referred to as MA plans, are CCPs except for private FFS plans. The term "Medicare health plan" is used as the umbrella term to refer to any private plan that provides full Medicare benefits and replaces original Medicare FFS. "Medigap" refers to individually purchased insurance that is supplemental to Medicare FFS and primarily pays the FFS cost sharing.

[19] Demonstration CCPs are excluded from the analyses.

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## SECTION 2
## DATA AND METHODS

This report was generated from three sources of data, the Medicare Health Plan Management System, including its Plan Benefit Package and out-of-pocket cost estimate data; Medicare's Enrollment Data Base; and risk scores generated using CMS's Hierarchical Coexisting Conditions risk adjustment methodology. In this chapter, these three data sources are described briefly along with a discussion of the analytic methods.

### 2.1 Data

*Health Plan Management System*

CMS requires that health plan contractors submit information about each of their health plans annually or more frequently if their data changes. This information is collected as part of the Adjusted Community Rate Proposal process used by CMS to ensure that benefits provided to Medicare beneficiaries are consistent with the capitation amounts paid to health plans; or, for non-M+C plans, to make information available for the Medicare Compare Web site maintained by CMS. The Health Plan Management System (HPMS) maintained by CMS collects service area, premium, enrollment, benefit, cost sharing, and other information for most Medicare health plans, including CCPs, demonstration plans, cost plans, and private FFS plans.[20] Two of the main repositories for this information are the Adjusted Community Rate (ACR) and Plan Benefit Package (PBP) datasets. This report utilizes information provided as part of the PBP. PPO demonstration plans are not required to fill out the ACR.

PBP is a survey of all benefit information provided by each health plan. The PBP dataset includes information on premiums, benefits, co-payments, coinsurance, deductibles, out-of-pocket maximums, etc. The outpatient drug benefit extract details drug benefits offered including benefit maximums and cost sharing for drugs in all tiers, by distribution channel (e.g., retail pharmacy versus mail order).

CMS generated out-of-pocket payment estimates for beneficiaries enrolled in managed care plans using each plan's submitted benefit information and information on utilization reported in the Medicare Current Beneficiary Survey (MCBS). CMS combined 1999 and 2000 MCBS data to create utilization information for a nationally representative cohort of 14,774 beneficiaries (Fu Associates, 2004). Beneficiaries who did not have both Part A and Part B coverage or who were in a long-term care facility for any part of the year were excluded. Each health plan's benefit structure, as reported in the ACR and PBP proposals, was then applied to the utilization for these beneficiaries to estimate out-of-pocket costs. These out-of-pocket costs were then averaged across beneficiaries for each health plan. The out-of-pocket cost data

[20] In CY 2004 this included the six types of M+C organizations, HMO, HMOPOS, PPO, PSO (State License), PSO (Federal Waiver of State License), private FFS, and eleven types of non-M+C organizations, Social HMO, Evercare, ORDI, 1876 Cost, Employer-Only Demo, HMO Alternative Pay Demo, HMOPOS Alternative Pay Demo, PPO Alternative Pay Demo, private FFS Alternative Pay Demo, PPO Demo, and Capitated Disease Management Demo.

contains information on average costs for each health plan for five health status categories,[21] and six age categories.[22] Age and health categories were created from self-reported information on MCBS.

In addition to the PBP and out-of-pocket cost data, other HPMS source files were used. Plan county service areas were obtained from the Contract Service Area Extract downloaded from the HPMS repository. Plan physician network size was obtained from the Physician Network Size file.

*CMS Enrollment Data Base*

CMS continuously updates a database known as the Enrollment Data Base (EDB), which includes all beneficiaries enrolled in Medicare Part A and/or Part B. EDB includes enrollment status, age and gender, place of residence, (ESRD) status, working age status, Medicaid status, and reason for Medicare entitlement. The analysis of the PPO demonstration uses the "unloaded" EDB, which is a point-in-time file containing information for all Medicare beneficiaries ever enrolled in Medicare at that time. Information was downloaded for all beneficiaries in the 21 PPO service area states as of March 28, 2004.

The analysis sample includes currently-enrolled beneficiaries[23] with both Part A and Part B coverage as of March 28, 2004, residing in the service area counties[24] of any PPO demonstration contract. Beneficiaries who died prior to March 28, 2004, are excluded. If disenrollees remain in the combined PPO service areas, they are included in the analysis, but they are assigned to their current (March 28, 2004) enrollment status. If disenrollees have moved out of the PPO service areas, they are excluded. The small number of current PPO enrollees who reside outside of the combined PPO service areas are also excluded. The analysis is thus a point-in-time sample of enrollees, not of all enrollees over a specific period.

*CMS Enrollee Risk Scores*

A portion of capitation payments to Medicare health plans are risk adjusted for beneficiary health status using the CMS Hierarchical Coexisting Conditions (CMS-HCC) model. These risk scores provide a measure of the health status, or expected costliness, of enrollees in each health plan. RTI obtained CMS-HCC risk scores based on all-encounter diagnoses from July 2002 to June 2003 for the sample of enrollees residing in the PPO service area counties. Beneficiaries without a complete diagnostic profile over that time (e.g., new Medicare beneficiaries) are assigned a demographic risk score.

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[21] Excellent, very good, good, fair, poor.

[22] Under age 65, 65 to 69, 70 to 74, 75 to 80, 80 to 85, and over age 85.

[23] Beneficiaries enrolled in employer-only contracts are excluded.

[24] Our analysis excludes counties where PPO enrollment is open only to members of specific employer groups.

## 2.2 Methods

*Plan Options Versus Contracts*

Organizations that contract with CMS to provide health coverage to Medicare beneficiaries are allowed to offer multiple plan options. A plan option refers to a specific benefit package offered in a specified service area. Each organization contracts with CMS and is assigned an "H-number" by CMS. In this report each contract is defined by its H-number. The demonstration includes 35 PPO contracts and 61 plan options. A plan option is defined by a unique H-number and plan-ID combination.

*Competing Plans*

The PPO demonstration service area is defined as all counties where at least one demonstration PPO plan is offered to Medicare beneficiaries.[25] This region includes 21 states and 222 counties. Competing plans have at least one county within their own service area that overlaps the 222 county PPO service area.[26,27]

Throughout this report, the Medicare-defined class of CCPs is used as a comparison for PPOs. CCPs are plans that include aspects of coordinated (or managed) medical care, such as a network of providers, a gatekeeper/primary care provider, and referral requirements. CCPs generally offer a provider network and only cover services provided by network providers or cover them at a reduced cost-sharing level. All M+C plans (now renamed Medicare Advantage) are CCPs except for private FFS plans. PPOs are themselves a type of CCP. There are 232 competing CCPs included in the HPMS. The term "Medicare health plan" is used as the umbrella term to refer to any private plan that provides full Medicare benefits and replaces original Medicare FFS.

In addition to comparing demonstration PPO results to competing CCPs, selected comparative information is provided about Medigap plans. Beneficiaries enrolled in Medicare can purchase supplementary insurance known as Medigap that pays some or all of Medicare cost sharing, and may provide additional benefits such as prescription drugs. Medigap premiums were obtained from the American Association of Retired Persons (AARP) Medigap plan by state. Medigap plan F is used for comparison because it is the most popular Medigap plan nationally. Medigap plan F covers most Medicare cost sharing, but does not cover prescription drugs.

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[25] Counties where enrollment is open only to members of specific employer groups are excluded.

[26] Employer-only plans are excluded.

[27] Competing plans must be a Part A and Part B Medicare plan (all PPO demonstration plans are Part A and Part B plans). Since we are not aware of any Part A only plans, in the table footnotes we state this sample restriction as "Excludes Part B only plans".

*Employer-Only Plans*

Certain PPO and Medicare health plan contracts create plans for employer organizations. These are defined as "employer-only" plans and allow only employees or retirees of that organization to enroll. Employer-only plans were excluded from the analysis where possible. They are totally excluded from the HPMS analyses because they can be identified by H-number/plan ID combination. In EDB, only the contract number is available, so employer-only plans cannot be explicitly excluded. For EDB enrollment analyses, counties were excluded where only employer-only PPO demonstration plans are offered.

*Stayer, Switcher, and Recent Beneficiaries*

To examine PPO market share among beneficiaries who newly enrolled in Medicare or switched health plans during the demonstration period, each beneficiary was assigned to one of the following three categories: STAYER, SWITCHER or RECENT. New beneficiaries who enrolled in the Medicare program during the demonstration period (on or after January 1, 2003) were defined as RECENT. A STAYER was defined as any beneficiary who did not change health plans during the demonstration period. A SWITCHER changed health plans at least once during the demonstration period. Changing health plans was defined as moving from FFS to a Medicare health plan or vice versa, or moving from one health plan contract to another.

Non-STAYERS refers to beneficiaries classified as either switchers or recent Medicare enrollees. All PPO enrollees (with the exception of the "Horizon stayers" discussed in the next section) are non-STAYERS. Hence, we often compare PPO enrollees to CCP non-STAYERS, that is, to recent enrollees in CCPs. This comparison excludes STAYERS, who are the longer-tenured CCP enrollees and less comparable to PPO enrollees, all of whom are new enrollees during the demonstration period.

*Horizon Stayers*

Enrollment in the Horizon Healthcare of New Jersey contract represents almost half of the total enrollment in the PPO demonstration (as of August 2004) and therefore tends to dominate enrollment analyses. Horizon essentially replaced its earlier Medicare HMO product with its similar PPO demonstration product (Greenwald et al., 2004).[28] Most enrollees in the HMO transferred to the demonstration plan. Technically these beneficiaries switched from the Horizon HMO to the Horizon demonstration plan, but in reality they are more similar to "stayers" because they have maintained continuous enrollment in a single organization's similar managed care plan. Enrollees who moved from Horizon's HMO to its demonstration plan are called "Horizon stayers." In some analyses, these beneficiaries were distinguished from other demonstration enrollees or excluded entirely.[29] Because of its large size and the unique circumstances surrounding the Horizon demonstration product, combining Horizon stayers with other demonstration enrollees may provide a misleading picture of PPO enrollment dynamics.

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[28] Horizon's HMO product continued but with a basic, limited benefit package ("value" option).

[29] Beneficiaries who enrolled in Horizon's demonstration contract after January 1, 2003, were included with other demonstration enrollees.

# SECTION 3
# PPO AVAILABILITY AND PLAN ENTRY

One persistent problem in the M+C program has been the waning willingness of health care organizations to participate with Medicare. Since the late 1990s, many M+C organizations have either terminated completely or contracted the service areas for their Medicare plans. Between 1998 and 2002, about 2.3 million Medicare beneficiaries were affected by M+C plan withdrawals from Medicare (Zarabozo, 2002). A relevant question for future Medicare health care relates to the willingness of health care organizations to offer PPOs in Medicare.

To date, one of the most difficult issues surrounding the M+C program has been uneven access to M+C plans across the country. Beneficiaries in urban areas, such as New York and Los Angeles, have typically had access to multiple health care options, whereas beneficiaries in rural areas have had limited access to managed care. One goal of the PPO demonstration was to increase the number of choices available to Medicare beneficiaries. To achieve that goal, the demonstration PPOs could play two potential policy roles. First, PPOs could locate in areas where existing Medicare managed care plans exist. The role of the PPO would, in this case, be to offer an additional managed care product type to beneficiaries who already have at least some access to a managed care plan. Second, PPOs could locate in areas with no existing Medicare CCP. In this case, the PPO expands beneficiary choice by offering access to a Medicare managed care option. One theory common among policy makers is that PPOs may be more likely to establish plans in nonurban and other underserved areas because of the availability of out-of-network benefits. Two important questions remain as to whether PPOs are likely to offer options in areas typically underserved by traditional managed care. Where have managed care organizations offered PPOs to Medicare beneficiaries under the demonstration? What do the locations of the Medicare PPO demonstrations tell policy makers about future access to PPOs?

This chapter describes PPO[30] availability and contribution to beneficiary choice of coordinated care options, and analyzes PPO participation in the demonstration. First, a descriptive analysis of PPO availability is provided, including a comparison of characteristics of counties where PPOs entered the demonstration with counties where PPOs did not enter. Second, to examine the factors correlated with PPO entry into some counties but not others, a multivariate model is developed.

## 3.1 PPO Availability and Contribution to Beneficiary Choice

### 3.1.1 PPO Service Areas

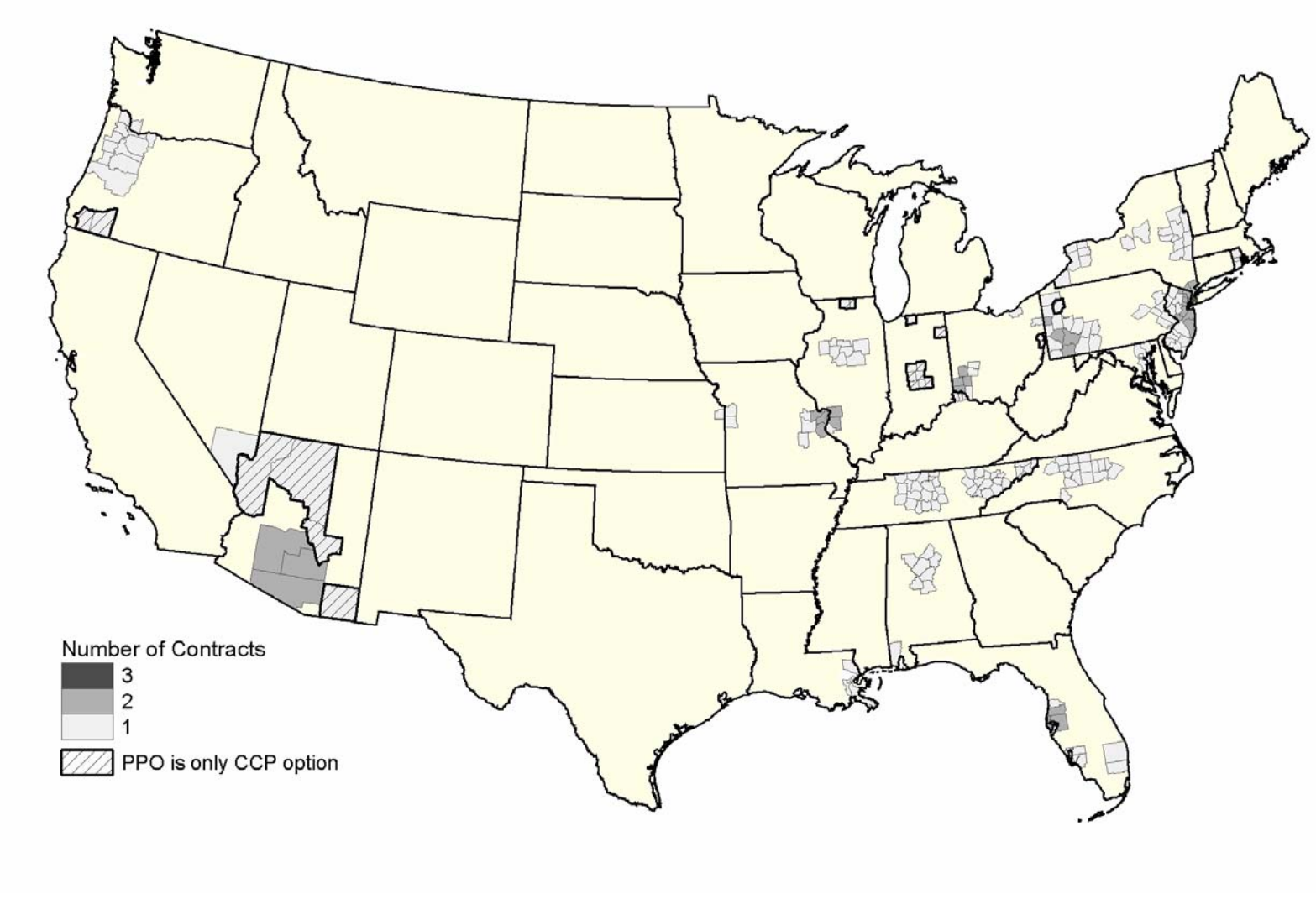
*Location of PPO Service Areas*

***Figure 3-1*** maps PPO service areas as of April 2004. The demonstration includes 17 parent companies operating 35 PPO contracts and 61 PPO plans.[31] PPO service areas are

[30] There are a few nondemonstration PPOs currently serving Medicare beneficiaries. The term PPO is used interchangeably with demonstration PPO.

[31] There are an additional eight employer-only plans for a total of 69.

**Figure 3-1**
**Service areas of Medicare PPO demonstration contracts, April 2004**




NOTE: PPO is PPO demonstration plans. CCP is coordinated care plans. Excludes employer-only plans.
SOURCE: RTI analysis of CMS HPMS April 2004 file.

located in 21 states in all four census regions, and in 9 of the 10 CMS regions (there are no PPO demonstration plans in the CMS Denver regional office area). PPO contracts are concentrated in the Mid-Atlantic (including New York/New Jersey), Midwest, and Southeast states (29 contracts). Only six contracts are located in the CMS New England, Southwest, Mountain, Pacific, and Northwest regions. Notably, no demonstration contracts are operating in California, the largest Medicare managed care market.[32] Other states with significant Medicare managed care penetration where PPOs are not available include Minnesota, Washington (apart from one county in the Portland metropolitan area), and Massachusetts.

*Availability of PPOs by Urbanicity*

***Table 3-1A*** presents the percentage of counties in which PPOs are available by urbanicity. PPOs are offered in 7 percent of all counties, including 27 percent of large metropolitan counties, 10 percent of medium/small metropolitan counties, 5 percent of micropolitan (small city) counties, and 1 percent of rural counties. All of the 41 nonmetropolitan counties in which PPOs are offered are adjacent to metropolitan areas. PPOs are available in less than half as many counties as CCPs.

***Table 3-1B*** presents the percentage of Medicare beneficiaries with access to at least one PPO plan by urbanicity. Nationwide, approximately one quarter (23.9 percent) of Medicare beneficiaries can enroll in a PPO plan versus 60 percent in a CCP. Over one-third of beneficiaries residing in large metropolitan areas have access to PPOs versus only about 1 percent of beneficiaries living in rural (nonmetropolitan, nonmicropolitan) areas.

*Location of PPOs Versus Other Coordinated Care Plans by Urbanicity*

***Figure 3-2*** compares the distribution by urbanicity of counties where PPOs and other CCPs are available. A higher proportion of PPO than other CCP service area counties are in large metropolitan areas (51 versus 39 percent), and a lower proportion are rural (4 versus 15 percent). That is, demonstration PPOs are relatively more likely than existing CCPs to locate in large metropolitan areas and less likely to locate in rural areas. There is no evidence that PPOs are more likely than other CCPs to expand Medicare managed care options in rural areas. The short time frame for demonstration implementation required reliance on existing managed care provider networks and may have limited PPO entry in rural counties, which largely lack existing networks. But the inability to negotiate favorable discounts with monopoly rural providers and other issues will continue to hinder PPO entry into rural areas even in the long run (Greenwald et al., 2004). The long-term role of Medicare PPOs in rural areas remains an open question.

[32] PacifiCare had planned a demonstration PPO in Southern California, but withdrew it after encountering difficulties establishing a provider network (Greenwald et al., 2004).

**Table 3-1A**
**Availability of PPOs and CCPs by urbanicity[1]**
**Percent of counties where at least one plan is available**

| | Total counties | PPO available | | CCP available | |
|---|---|---|---|---|---|
| | | N | % | N | % |
| Total | 3,143 | 222 | 7.1 | 587 | 18.7 |
| Metropolitan, Total | 1,091 | 181 | 16.6 | 421 | 38.6 |
| Large[2] | 415 | 112 | 27.0 | 231 | 55.7 |
| Medium/Small[3] | 676 | 69 | 10.2 | 190 | 28.1 |
| Nonmetropolitan, Total | 2,052 | 41 | 2.0 | 166 | 8.1 |
| Micropolitan | 674 | 32 | 4.7 | 79 | 11.7 |
| Rural[4] | 1,378 | 9 | 0.7 | 87 | 6.3 |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan.

[2] Metropolitan areas of one million or more population.

[3] Metropolitan areas of less than one million population.

[4] Nonmetropolitan, nonmicropolitan.

NOTE: Computer Output – eo011a.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table 3-1B**
**Availability of PPOs and CCPs by urbanicity[1]**
**Percent of beneficiaries to whom at least one plan is available**

| | Total beneficiaries | PPO available | | CCP available | |
|---|---|---|---|---|---|
| | | N | % | N | % |
| Total | 37,028,462 | 8,851,844 | 23.9 | 22,094,985 | 59.7 |
| Metropolitan, Total | 28,934,061 | 8,370,793 | 28.9 | 20,902,712 | 72.2 |
| Large[2] | 17,413,885 | 6,487,107 | 37.3 | 15,316,210 | 88.0 |
| Medium/Small[3] | 11,520,176 | 1,883,686 | 16.4 | 5,586,502 | 48.5 |
| Nonmetropolitan, Total | 8,094,401 | 481,051 | 5.9 | 1,192,273 | 14.7 |
| Micropolitan | 4,617,786 | 434,959 | 9.4 | 847,818 | 18.4 |
| Rural[4] | 3,476,615 | 46,092 | 1.3 | 344,455 | 9.9 |

[1] Includes Part A and Part B plans and beneficiaries only. Excludes employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan.

[2] Metropolitan areas of one million or more population.

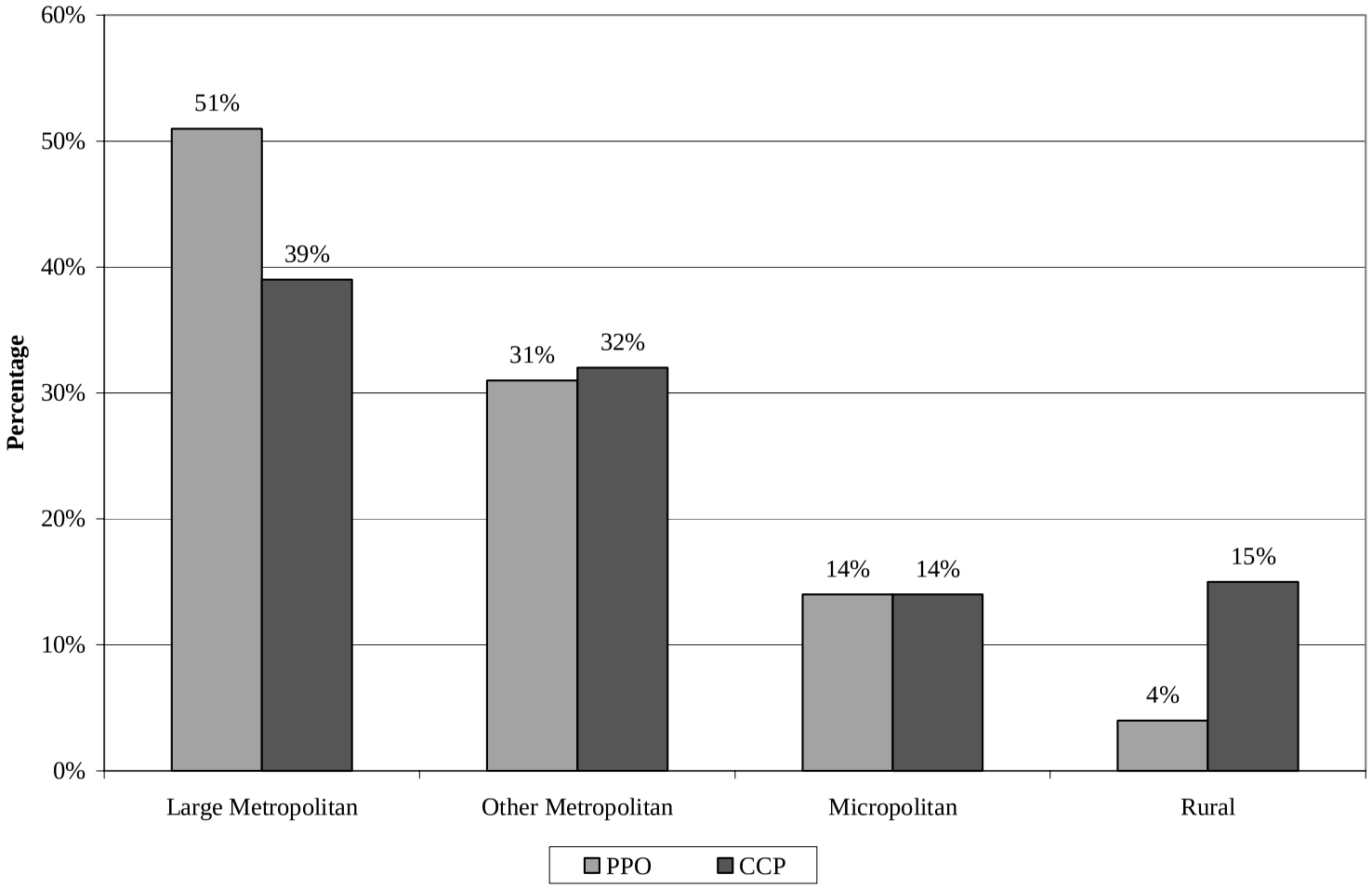
[3] Metropolitan areas of less than one million population.

[4] Nonmetropolitan, nonmicropolitan.

NOTE: Computer Output – eo011a.lst, eo030.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Figure 3-2**
**Distribution of PPO and CCP counties by urbanicity**




NOTE: PPO is PPO demonstration plans. CCP is coordinated care plans. Excludes Part B only and employer-only plans.
SOURCE: RTI analysis of CMS HPMS April 2004 file.

*PPO Contribution to Beneficiary Choice of Coordinated Care Options*

PPOs have located mostly where other coordinated care plans are offered, but have increased the choice of such plans for Medicare beneficiaries. ***Table 3-2A*** indicates the distribution of PPO service area counties by number of other CCP contracts available. In 21 of the 222 PPO service area counties (10 percent), PPOs are the only coordinated care option. In 72 counties (32 percent), PPOs increase beneficiaries' choice of coordinated care contracts from one to two; in 66 counties (30 percent) from two to three; and in 63 counties (29 percent) there is an added option to three or more other coordinated care contracts. Hence, in over two thirds of their service area counties, PPOs are adding a choice to zero, one, or two other coordinated care contracts. Although PPOs have not primarily extended managed care options to areas where they would otherwise be unavailable, they have added an option to a small number of other options in the majority of their service area counties. ***Table 3-2B*** shows the number and percentage of beneficiaries residing in PPO service area counties by the number of other CCP choices.

**Table 3-2A**
**Number of other coordinated care choices (contracts)**
**in PPO service area counties[1]**

| | | |
|---|---|---|
| Total counties | 222 | 100.0% |
| Number of Other Choices | | |
| None | 21 | 9.5 |
| One | 72 | 32.4 |
| Two | 66 | 29.7 |
| Three | 31 | 14.0 |
| Four | 23 | 10.4 |
| Five or more | 9 | 4.1 |

[1] Excludes Part B only and employer-only plans.
PPO is PPO demonstration plans.

NOTE: Computer Output - eo010_rr.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table 3-2B**
**Number of beneficiaries by number of other coordinated care choices in PPO service area counties[1]**

| | | |
|---|---|---|
| Total beneficiaries | 8,851,844 | 100.0% |
| Number of Choices | | |
| None | 454,885 | 5.1 |
| One | 1,776,290 | 20.1 |
| Two | 1,922,459 | 21.7 |
| Three | 1,771,566 | 20.0 |
| Four | 1,241,220 | 14.0 |
| Five or more | 1,685,424 | 19.0 |

[1] Includes Part A and Part B plans and beneficiaries only. Excludes employer-only plans. PPO is PPO demonstration plans.

NOTE: Computer Output - eo010_rr.lst, eo030b.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

***Table 3-3*** lists the 21 PPO service area counties in which a PPO provides the only coordinated care option (these counties are also outlined in red (bold) in Figure 3-1). Nearly half of these counties are in Indiana and consist of the service area of Advantage Health Plan, a local Catholic-health-system affiliated plan (Greenwald et al., 2004). In eight of these counties, seven of which are in Indiana, a PPO is the only Medicare health plan of any type available.

### 3.1.2 Relationship of Higher Demonstration Payment Rate to PPO Availability

Congress has modified county payment rates for Medicare health plans several times—most recently again in the MMA of 2003—in part to encourage MA organizations to offer plans in more areas and particularly in underserved areas, such as rural counties. MMA also includes payment incentives for entry of regional PPOs (beginning in 2006), particularly into regions not served by other regional PPOs. Thus, the effect of financial incentives on plan entry is of significant policy interest.

As part of the PPO demonstration, in 2003 CMS offered the option of paying demonstration plans the higher of the regular capitated county rate or 99 percent of Medicare FFS per capita expenditures. If this incentive was effective in inducing plan entry, one would expect to see greater entry in counties where the demonstration payment rate was higher than the usual rate. ***Table 3-4*** indicates PPO entry in counties where the demonstration payment rate was

**Table 3-3**
**Counties where a PPO is the only coordinated care plan option[1]**

| County code | State - County name | No other CCPs offered | No M+C plans offered[2] | No Medicare health plans offered[3] |
|---|---|---|---|---|
| 03010 | AZ - Cochise | X | | |
| 03020 | AZ - Coconino | X | | |
| 03030 | AZ - Gila | X | | |
| 03070 | AZ - Mohave | X | X | X |
| 14030 | IL - Boone | X | | |
| 14991 | IL - Winnebago | X | | |
| 15010 | IN - Allen | X | | |
| 15050 | IN - Boone | X | X | X |
| 15280 | IN - Hamilton | X | X | X |
| 15310 | IN - Hendricks | X | X | X |
| 15400 | IN - Johnson | X | X | X |
| 15480 | IN - Marion | X | X | X |
| 15540 | IN - Morgan | X | X | X |
| 15700 | IN - St. Joseph | X | | |
| 15720 | IN - Shelby | X | X | X |
| 21040 | MD - Calvert | X | X | |
| 21080 | MD - Charles | X | X | |
| 36420 | OH - Jefferson | X | X | |
| 38140 | OR - Jackson | X | X | |
| 38160 | OR - Josephine | X | X | |
| 39730 | PA - Venango | X | | |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. M+C is Medicare+Choice.

[2] In addition to CCPs, M+C plans include private fee-for service (FFS) plans.

[3] In addition to M+C plans, includes cost plans, social HMOs, Medicare demonstrations, etc.

NOTE: Computer Output - pop35.lst

SOURCE: RTI analysis of the CMS HPMS April 2004 file

**Table 3-4**
**PPO entry by county payment status[1]**

| | Total | | County with higher demonstration payment rate[2] | | | |
|---|---|---|---|---|---|---|
| | | | Yes | | No | |
| | N | % | N | % | N | % |
| All Counties | | | | | | |
| Total | 3,132 | 100.0 | 500 | 100.0 | 2,632 | 100.0 |
| PPO Entry | 222 | 7.1 | 37 | 7.4 | 185 | 7.0 |
| Metropolitan Counties | | | | | | |
| Total | 1,090 | 100.0 | 169 | 100.0 | 921 | 100.0 |
| PPO Entry | 181 | 16.6 | 31 | 18.3 | 150 | 16.3 |
| Nonmetropolitan Counties | | | | | | |
| Total | 2,042 | 100.0 | 331 | 100.0 | 1,711 | 100.0 |
| PPO Entry | 41 | 2.0 | 6 | 1.8 | 35 | 2.0 |

[1] Excludes employer-only plans. PPO is PPO demonstration plan.

[2] CMS offered PPO demonstration plans the higher of the usual county payment rate or fee-for-service per capita costs.

NOTE: Computer Output - meea03.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

higher than the regular capitated rate versus counties where it was not. A higher demonstration payment rate was offered in 500 counties. At least one PPO is available in 37 (7 percent) of these counties. The demonstration payment rate was the same as the regular rate in 2,632 counties. At least one PPO is available in 185 (7 percent) of these counties. Hence, there is no difference in the rate of PPO entry in counties with or without the higher payment rate. When counties are divided by urbanicity, the rate of PPO entry is much higher in urban (metropolitan) counties, but is roughly the same in counties with and without the higher demonstration payment rate in both urban and rural areas.

There is no evidence that the higher payment rate offered under the PPO demonstration was systematically effective in inducing plan entry.[33] It may be that the extra payments were simply too small to be effective or they were viewed as transitory by plans. Indeed, MMA raised payments in 2004 for all Medicare Advantage plans to at least 100 percent of FFS per capita costs, eliminating the demonstration payment differential.

### 3.1.3 Comparison of PPO and Non-PPO Counties

This section continues the analysis of PPO availability by comparing selected characteristics of counties where at least one PPO plan is available (PPO counties) with characteristics of counties without a PPO plan (non-PPO counties). Because the majority of PPO counties are metropolitan, and the majority of non-PPO counties are nonmetropolitan, entry/nonentry county characteristics are also compared by metropolitan and nonmetropolitan status.

As shown in ***Table 3-5***, compared with non-PPO counties, PPO counties on average have more hospital competition (lower hospital concentration), more health plan contracts, higher Medicare managed care penetration, a sicker Medicare population (higher risk score), lower M+C payment volatility, a larger Medicare population, a lower proportion of elderly living in poverty, a higher proportion of high-income beneficiaries, about the same proportion with limited English, a lower proportion living in rural Census tracts, and a higher PPO demonstration payment rate. Consistent with the results reported in the previous section, the percentage of PPO and non-PPO counties with a PPO demonstration payment rate higher than the county capitation rate is about the same.

When PPO counties are compared with non-PPO counties holding constant metropolitan/nonmetropolitan status most of the same differences emerge. Differences in the proportion of wealthy beneficiaries do disappear. All-county differences in high-income proportion apparently reflect the concentration of PPOs in metropolitan areas more than an independent effect of high income. In nonmetropolitan counties, PPO counties have a lower proportion with limited English than non-PPO counties, whereas in metropolitan counties the reverse is true.

Although the observed differences are associations, not necessarily causal relationships, hypotheses can be advanced to account for them. First, PPOs can negotiate more favorable prices for hospital stays in markets with more hospital competition (less concentration). Second, markets with higher Medicare managed care penetration and number of contracts are markets where Medicare managed care plans have been successful and have established provider networks. Third, lower M+C payment volatility and higher PPO demonstration payment rates are positive financial incentives for PPO entry. Fourth, larger Medicare populations translate into larger pools of potential PPO enrollees over which to spread the fixed costs of establishing a new plan. Lower rates of poverty among the elderly might indicate a greater ability for beneficiaries to pay the higher PPO than CCP premiums, although a larger high-income

[33] In our case studies, some plans indicated that the higher demonstration payment rate contributed to their decision to participate in the demonstration (Greenwald et al., 2004). But higher payment has not systematically increased the rate of plan entry.

## Table 3-5
## Characteristics of PPO and non-PPO counties[1,2,3]

| | Total | | | | Metropolitan | | | | Nonmetropolitan | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PPO | | Non-PPO | | PPO | | Non-PPO | | PPO | | Non-PPO | |
| Variable | N | Means & proportions | N | Means & proportions | N | Means & proportions | N | Means & proportions | N | Means & proportions | N | Means & proportions |
| Herfindahl index of market concentration of hospital shares of Medicare patient days | 207 | 0.62 | 2,290 | 0.83 | 169 | 0.57 | 710 | 0.70 | 38 | 0.81 | 1,580 | 0.89 |
| Number of Medicare health plan contracts in county | 222 | 4.1 | 1,966 | 1.6 | 181 | 4.3 | 618 | 1.9 | 41 | 3.5 | 1,348 | 1.5 |
| Medicare managed care penetration of the Medicare population (enrollees/eligibles) | 222 | 15.3% | 2,917 | 2.5% | 181 | 16.0% | 909 | 5.1% | 41 | 12.2% | 2,008 | 1.4% |
| HCC risk score based on FFS beneficiaries, 2001 | 222 | 1.02 | 2,917 | 0.95 | 181 | 1.02 | 909 | 0.97 | 41 | 1.01 | 2,008 | 0.95 |
| Standard deviation in county payment rates, 2000-2003 | 222 | $33 | 2,905 | $36 | 181 | $33 | 907 | $36 | 41 | $31 | 1,998 | $36 |
| Total elderly in 2000 (aged 65+) | 222 | 39,250 | 2,916 | 9,012 | 181 | 45,735 | 909 | 21,355 | 41 | 10,620 | 2,007 | 3,421 |
| Proportion of the elderly in poverty | 222 | 8.9% | 2,916 | 11.5% | 181 | 8.6% | 909 | 9.4% | 41 | 10.4% | 2,007 | 12.4% |
| Proportion of the elderly with annual household income more than $50,000 | 222 | 20.5% | 2,916 | 16.7% | 181 | 21.8% | 909 | 20.8% | 41 | 14.4% | 2,007 | 14.9% |
| Proportion of the elderly who speak poor or no English | 222 | 1.5% | 2,908 | 1.3% | 181 | 1.7% | 909 | 1.5% | 41 | 0.5% | 1,999 | 1.2% |
| Proportion of the elderly population living in rural (pop<1,000 PPsqMi) census tracts, 2001 | 222 | 53.5% | 2,916 | 83.4% | 181 | 47.2% | 909 | 64.0% | 41 | 81.2% | 2,007 | 92.2% |
| PPO demonstration payment rate | 222 | $587 | 2,918 | $535 | 181 | $595 | 909 | $557 | 41 | $549 | 2,009 | $526 |
| PPO demonstration payment rate higher than county capitation rate | 222 | 16.7% | 2,921 | 16.2% | 181 | 17.1% | 910 | 15.3% | 41 | 14.6% | 2,011 | 16.7% |

[1] PPO and non-PPO counties are counties where a demonstration PPO is or is not available, respectively.

[2] Because of data limitations, the number of counties is not the same for all variables.

[3] PPO and non-PPO counties are defined as of January 2004. Employer-only plans are excluded.

NOTE: Computer Output - meea05.lst.

SOURCE: RTI analysis of CMS and other data.

proportion does not seem to be independently associated with PPO entry (aside from metropolitan/nonmetropolitan location). The mean risk score for PPO counties is 1.02 (0.95 for non-PPO counties).[34] It is not clear why PPOs have entered counties with sicker beneficiaries. Possibly risk sharing arrangements between CMS and PPOs, and (partial) risk adjustment of PPO demonstration payment rates, have mitigated the incentive for PPOs to avoid counties with higher risk.[35] Higher risk scores may be correlated with other factors that promoted PPO entry, a hypothesis that is tested in the multivariate analysis reported below.

Overall, the most striking difference between PPO and non-PPO counties is the much higher Medicare managed care penetration rate in the counties where PPOs are located (15 versus 3 percent). Even controlling for metropolitan/nonmetropolitan status, strong differences remain. PPOs tend to locate in larger markets where Medicare managed care is already present and relatively successful. Thus, the same factors that explain Medicare managed care penetration in general explain PPO entry.

## 3.2 Multivariate Analysis of PPO Availability

In this section, the determinants of PPO plan entry are analyzed in a multivariate framework to examine the relative importance of various factors predicting PPO plan entry into some counties, but not others. A description of our approach and methods is provided, followed by the results.

### 3.2.1 Approach and Methods

The brief overview of selected relevant literature provides some clues as to the types of factors that may be important determinants and predictors of where managed care plans (including PPOs) choose to enter markets. The following four classes of explanatory variable were used:

- Medicare managed care market characteristics,
- population characteristics,
- Medicare payment rates, and
- competing insurance options and hospital markets.

Variables were chosen based on the literature review and insights gained from site-visit interviews with the demonstration PPOs. Specific variables and their interpretations are discussed further below.

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[34] Chapter 5 presents risk scores for beneficiaries residing in PPO service area counties. These risk scores are not directly comparable with the risk scores presented in Table 3-5. The risk scores in Chapter 5 are 2004 risk scores based on the CMS-HCC risk adjustment model, whereas the risk scores in Table 3-5 are 2001 risk scores based on the PIP-DCG risk adjustment model.

[35] Because a PPO enters a sicker-than-average market does not necessarily mean that the PPO will experience unfavorable selection. As shown in Chapter 5, overall, PPOs are experiencing favorable selection relative to FFS.

In discussions with demonstration PPOs during the site visits, market area factors and payment rates were often cited as important in the decision to participate. Pai and Clement (1999) used 1994-1995 data to examine determinants of entry into Medicare risk plans, focusing on attractiveness of markets, market-area attributes, and organizational attributes. HMO size in the commercial sector and Adjusted Average Per Capita Cost (AAPCC) rates were found to be the most significant predictors. Using 1996 and 1997 data, Brown and Gold (1999) looked at the local market forces that contribute to growth in M+C plan enrollments and found that among other things, enrollments in M+C plans were higher in places with lower availability of alternatives, such as affordable supplemental insurance. Penrod, McBride, and Mueller (2001) examined the effects of AAPCC payment rates and their volatility on Medicare risk plan enrollment at the county level. Using 1996 data, they found that the AAPCC rate had a small effect, but that commercial HMO plan enrollment in the area was a much stronger predictor of M+C plan enrollment. Volatility in the AAPCC rate was associated with a reduced probability of M+C plan enrollment in counties.

In the literature, population characteristics have been noted for importance in predicting managed care plan entry. Cawley et al. (2001) used ordered probit regression to estimate the predicted number of HMOs offering M+C plans in a county based on entry conditions and beneficiary characteristics, using a time series from 1994 to 2000. In both the Penrod and Cawley studies, factors with the largest (and statistically significant) impacts on enrollment were the proportion of younger elderly in the county and the existence of a higher market share for private-sector HMOs. McBride et al. (2001) looked at determinants of M+C plan availability in rural areas in 1997 and 2000, and distinguish rural places adjacent to more urban counties and Metropolitan Statistical Areas (MSAs) from rural "islands" that are not near more urban places. In 1997, 22.5% percent of rural counties adjacent to an MSA had an M+C plan available, but the percentage declined to 20.5% percent by 2000. Also, about 4 percent of rural counties (not adjacent to MSAs) had an M+C plan in 1997, which increased slightly to 4.2 percent by 2000.

To analyze entry behavior for the Medicare PPO demonstration, the county is defined as the relevant unit of observation. An empirical model is used that is appropriate to study binary outcomes: the binary logit model.[36] The binary dependent variable is defined as =1 for all counties with any PPO demonstration participants in open enrollment plans (excludes employer-only plans), and =0 for otherwise. Out of 3,125 counties in the United States, 222 counties had demonstration entrants. Not all U.S. counties were included in the analysis; some (e.g., Alaska, the District of Columbia.) were deleted due to missing data; the final sample size was 2,921 counties in 46 states.

[36] The probit and logit distributions differ at the tails, with wider tails in the logit than the probit. Specification tests were used to determine whether one distribution (normal or logistic) is a better fit to the data, and results are presented using the logistic model, which had a slightly better fit to the data. Estimation results were found to be quite robust to the distributional form (logit or probit) assumed in the model specification.

Explanatory variables and their sample statistics are contained in ***Table 3-6***. The data used in constructing the variables listed in Table 3-7 were derived from a variety of sources: CMS, U.S. Census, AARP, InterStudy, and others. A mixture of county-level and state-level data was used in the analysis because some variables were not available at the county-level. The model was estimated including the AARP plan's statewide Medigap premiums for Plan F, the Medigap premium benchmark used by most PPO demonstration plans. This resulted in the loss of four states from the analysis, because a Plan F did not exist in the state (Minnesota, Wisconsin, Vermont) or the premium data could not be obtained (Massachusetts).

### 3.2.2 Results

Findings from the analysis are displayed in ***Table 3-7***. Maximum likelihood parameter estimates were transformed to marginal impacts on the probability of entry.[37] Impacts are shown for both a one unit change in each explanatory variable and a one standard deviation change. The latter allows comparisons among the magnitude of effects of variables measured in different units. Overall, the model predicts entry/nonentry correctly 93.1 percent of the time. Entry alone is predicted correctly 54.5 percent of the time, while nonentry is predicted correctly 96.3 percent of the time.

*Factors that Predict Medicare PPO Entry: Medicare Managed Care Market Characteristics*

Counties and states with higher managed care penetration (both Medicare and commercial) had an increased likelihood of demonstration plan entry. This is consistent with information gathered from site visits, where plans stated that having an existing provider network in place in an area was crucial to joining the demonstration. It also indicates that the same factors that increase managed care penetration in general provide a more hospitable environment for Medicare PPOs. Counties with a larger number of competing M+C contracts (NUM_MC_02) provide a larger number of existing provider networks to utilize for a new PPO product, and indicate a favorable environment for Medicare managed care. Number of existing contracts has a significant positive association with PPO entry. M+C plan penetration was also significant, but had a nonlinear effect (DD2-DD5) where the probability of entry increased up to about a 40 percent penetration, but was not significant for counties with higher penetration. Higher commercial PPO or HMO penetration (XPPO or XHMO02) raised the likelihood of Medicare PPO entry, holding Medicare managed care contracts and penetration constant. Commercial networks and products provide an alternative platform for launching a new Medicare PPO plan. Overall, consistent with the descriptive results, PPOs entered where managed care was already present and relatively successful.

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[37] Marginal impacts are obtained from the regression parameters as follows. The impact of a variable on the entry probability varies by observation, as it is a function of the logistic density function evaluated at that observation (county). An average effect is estimated by first evaluating the logistic density function for each county over all variables in the model (the $\beta$'X value for each county), then averaging the county-specific density values. The average for this model is 0.34547. This number is then used to multiply the parameter estimate for each variable, converting it into an 'average' probability impact for the variable.

## Table 3-6
## Variable Definitions and Sample Statistics for Variables Used in PPO Entry Analysis

| Variable | Description | Min | Max | Mean | St Dev |
|---|---|---|---|---|---|
| XELDERPOV | Proportion of the elderly in poverty | 0.000 | 0.481 | 0.117 | 0.058 |
| XHIGH | Proportion of the elderly with HH income > $50k | 0.027 | 0.646 | 0.174 | 0.070 |
| SDEVRATE000 | Standard deviation in county payment rate, 2000-2003 | 14.552 | 74.720 | 36.095 | 14.850 |
| DEMOPAY | The greater of the 2003 MA payment rate or the 99% FFS rate | 510.38 | 1025.13 | 539.18 | 47.61 |
| OVER | Binary variable indicating counties where 99% FFS > MA payment rate | 0.000 | 1.000 | 0.1677 | 0.3737 |
| RISK01 | HCC risk score for FFS population | 0.719 | 1.298 | 0.964 | 0.071 |
| XRURELD | Proportion of the elderly in rural census tracts | 0.000 | 1.000 | 0.815 | 0.276 |
| RXDSCTPROG | State indicator of whether a discount drug program exists for the elderly | 0.000 | 1.000 | 0.117 | 0.321 |
| RXSUBZ03 | State indicator of whether a subsidized drug program exists for the elderly | 0.000 | 1.000 | 0.366 | 0.482 |
| XPROVMEDI03 | State percent of providers accepting Medicare assignment | 77.200 | 97.300 | 92.158 | 3.849 |
| LARGE3 | State market share in top 3 commercial insurers | 30.000 | 96.000 | 60.304 | 16.842 |
| DD2 | Dummy variable for counties with M+C penetration between 0 and 15%, 9/2002 | 0.000 | 1.000 | 0.873 | 0.333 |
| DD3 | Dummy variable for counties with M+C penetration between 15% and 25%, 9/2002 | 0.000 | 1.000 | 0.069 | 0.254 |
| DD4 | Dummy variable for counties with M+C penetration between 25% and 40%, 9/2002 | 0.000 | 1.000 | 0.031 | 0.174 |
| DD5 | Dummy variable for counties with M+C penetration greater than 40%, 9/2002 | 0.000 | 1.000 | 0.019 | 0.137 |
| NUM_MC_02 | Number of managed care plans in the county, 9/2002 | 0.000 | 21.00 | 1.315 | 1.465 |
| XPPO | State proportion of population in commercial PPOs, 2002 | 0.131 | 0.494 | 0.367 | 0.066 |
| XHMO02 | Proportion of population in commercial HMOs, 2002 | 0.000 | 0.482 | 0.168 | 0.095 |
| GAP9802 | Change in commercial HMO penetration of population, 1998-2002 | -0.201 | 0.048 | -0.032 | 0.039 |
| M1 | Binary variable indicating a major metropolitan area, using 2003 BEALE codes | 0.000 | 1.000 | 0.132 | 0.339 |
| M2 | Binary variable indicating a lesser metropolitan area, using 2003 BEALE codes | 0.000 | 1.000 | 0.218 | 0.413 |
| PBCARE | State average overreporting MA plans' proportion of Medicare beneficiaries with drug coverage, 2002 | 0.000 | 1.000 | 0.532 | 0.407 |
| XPOORNE | Proportion of the elderly with little or no English language ability, 2000 | 0.000 | 0.615 | 0.014 | 0.041 |
| TOTELD00 | Total count of persons over 64 years of age in 2000 (in thousands) | .037 | 3,596 | 22 | 131 |
| EMPLOYERCPV | State percentage of the elderly with employer-provided health insurance, 2001 | 15.100 | 49.400 | 31.194 | 6.889 |
| INDINSUR_01 | State percentage of the elderly with private supplemental insurance, 2001 | 16.200 | 58.600 | 31.759 | 11.087 |
| CINDEX | Index of competition among hospitals for Medicare inpatients, 2001 | 0.000 | 47.618 | 1.282 | 1.794 |
| PLANF | AARP plan premium for Medigap plan F, 2004 | 89.60 | 178.75 | 120.53 | 19.34 |
| PLANF*NYNJ | AARP plan premium for Medigap plan F interacted with a dummy variable indicating NY or NJ | 0.00 | 170.50-178.75 | 4.69 | 28.42 |

SOURCE: RTI analysis of CMS and other data.

**Table 3-7**
**Logistic regression results for Medicare PPO demonstration plan entry : All states except MN, WI, VT, MA**

| Parameter | Definition of variable | Marginal impact of a 1-unit change on probability | Marginal impact of a 1-standard-deviation change on probability | p-value |
|---|---|---|---|---|
| XELDERPOV | Proportion of the elderly in poverty | 0.190 | 0.011 | 0.123 |
| XHIGH | Proportion of the elderly with household income > $50,000 | -0.067 | -0.005 | 0.401 |
| SDEVRATE000 | Standard deviation in county payment rate, 2000-2003 | 0.0004 | 0.005 | 0.209 |
| DEMOPAY | The greater of the 2003 M+C payment rate or the 99% FFS rate | 0.0002 | 0.010 | 0.017 |
| OVER | Binary variable indicating counties where 99% FFS > M+C payment rate | -0.015 | -0.006 | 0.201 |
| RISK01 | HCC risk score for FFS population | 0.285 | 0.020 | 0.001 |
| XRURELD | Proportion of the elderly in rural census tracts | -0.037 | -0.010 | 0.033 |
| RXDSCTPROG | State indicator of whether a discount drug program exists for the elderly | -0.012 | -0.004 | 0.363 |
| RXSUBZ03 | State indicator of whether a subsidized drug program exists for the elderly | 0.080 | 0.039 | 0.000 |
| XPROVMEDI03 | State percent of providers accepting Medicare assignment | 0.002 | 0.008 | 0.258 |
| LARGE3 | State market share in top 3 commercial insurers | 0.002 | 0.034 | 0.000 |
| DD2 | Dummy variable for counties with M+C penetration between 0 and 15%, 2002 | 0.083 | 0.028 | 0.000 |
| DD3 | Dummy variable for counties with M+C penetration between 15% and 25%, 2002 | 0.083 | 0.021 | 0.000 |
| DD4 | Dummy variable for counties with M+C penetration between 25% and 40%, 2002 | 0.102 | 0.018 | 0.000 |
| DD5 | Dummy variable for counties with M+C penetration greater than 40%, 2002 | 0.041 | 0.006 | 0.219 |
| NUM_MC_02 | Number of unique managed care plan contracts in the county, 2002 | 0.020 | 0.029 | 0.000 |
| XPPO | State proportion of population in commercial PPOs, 2002 | 0.420 | 0.028 | 0.000 |
| XHMO02 | Proportion of population in commercial HMOs, 2002 | 0.222 | 0.021 | 0.005 |
| GAP9802 | Change in commercial HMO penetration of population, 1998-2002 | -0.655 | -0.026 | 0.000 |
| M1 | Dummy variable for major metropolitan areas (BEALE=1) | 0.064 | 0.022 | 0.000 |
| M2 | Dummy variable for lesser metropolitan areas (BEALE=2 or 3) | 0.039 | 0.016 | 0.000 |
| PBCARE | State average of M+C plans' proportion Medicare beneficiaries with drug coverage, 2002 | 0.030 | 0.012 | 0.019 |
| XPOORNE | Proportion of elderly with little or no English language ability, 2000 | -1.041 | -0.043 | 0.000 |
| TOTELD00 | Total count of persons over 64 years of age in 2000 | 0.000001 | 0.000 | 0.961 |
| EMPLOYERCPV | State percentage of the elderly with employer-provided health insurance, 2001 | -0.005 | -0.034 | 0.000 |
| INDINSUR_01 | State percentage of the elderly with private supplemental insurance, 2001 | -0.004 | -0.044 | 0.000 |
| CINDEX | Index of competition among hospitals for Medicare inpatients, 2001 | -0.003 | -0.005 | 0.152 |
| PLANF | AARP's Medigap Plan F premium, by state, 2004 | -0.001 | -0.019 | 0.000 |
| PLANF*NYNJDUM | AARP Medigap Plan F premium interacted with NY and NJ dummy | 0.001 | 0.028 | 0.000 |
| McFadden's Rho-sq | | | 0.555 | |
| Overall Prediction Success | | | 93.0% | |
| Entry Prediction Success (Sensitivity) | | | 54.1% | |
| Non-Entry Prediction Success (Specificity) | | | 96.2% | |

SOURCE: RTI analysis of CMS and other data.

However, holding constant the level of managed care penetration, the analysis suggests that decreasing commercial HMO market penetration raised the likelihood of Medicare PPO entry. The change in commercial HMO penetration from 1998 to 2002 (GAP9802) has a negative and significant coefficient. This period was a time of retrenchment or backlash against HMOs in many regions of the country, when the more loosely managed PPOs provided an attractive alternative. In Table 3-7, the mean of GAP9802 is negative, with almost 20 percent retrenchment in three states (Delaware, Oregon, Vermont) and very modest (< 5 percent) positive growth in only nine states (Missouri, Iowa, Wyoming, Oklahoma, Michigan, Montana, Kentucky, California, South Dakota). An increase in HMO penetration since 1998 is associated with a lower probability of entry by PPO demonstration plans. California is one of these places, with high continued presence and relative success of HMOs. The only original demonstration PPO to withdraw prior to implementation was PacifiCare in the California market, because of physician group success with and preference for the HMO model (Greenwald et al., 2004).

*Factors that Predict Medicare PPO Entry: Population Characteristics*

In the current model, counties in metropolitan areas (M1 and M2)—especially those with a population of 1 million or more (M1)—were more likely to attract entry than nonmetropolitan counties. The proportion of the elderly with little or no English language ability is a strong, negative predictor. Places with a higher proportion of the elderly with poor English skills occur across the spectrum of the urban-rural continuum, so this is not a rural phenomenon. This finding is also consistent with information from site visits regarding the intensive marketing effort required to launch a new PPO product among the elderly. Few plans actively targeted non-English speaking populations with marketing efforts. Income levels among the elderly and elderly population size were not significant predictors in this model, nor was the recent volatility in payment rates. The HCC risk score (based on the FFS population) had a significant positive impact on PPO entry, which is surprising as plans would be expected to avoid high-risk areas.

*Factors that Predict Medicare PPO Entry: Medicare Payment Rates*

The level of plan reimbursement under the demonstration was the higher of the M+C county rate or the 99 percent FFS rate (DEMOPAY). A higher payment rate (DEMOPAY) was positively associated with plan entry. DEMOPAY mostly reflects higher payment rates available to all capitated plans. In some counties, the 99 percent FFS payment rate was higher than the M+C rate (which occurred in counties in 36 of the 46 states studied), creating a higher incremental payment available only to demonstration plans. These counties are captured by the variable OVER. The model suggests that the higher incremental demonstration payment rates had little or no impact on predicted PPO entry: the impact of OVER is not statistically different from zero. This is consistent with the descriptive findings and the site visit discussions with plans. Most plans indicated that the additional payments offered under the PPO demonstration were not as important to the entry decisions as several other factors.

*Factors that Predict Medicare PPO Entry: Competing Insurance Options and Hospital Markets*

Theoretically, PPOs might be more likely to enter markets in states with some type of current publicly subsidized drug program. Since PPOs were encouraged to offer a drug benefit under the demonstration during the application and approval process, PPOs may have been

concerned about adverse selection in areas where few alternative sources of drug coverage were available. States with a subsidized drug program for the elderly were attractive to PPO plan entrants, but states with discount drug programs for the elderly were not significantly more attractive. Some states had both kinds of programs (Maryland, the District of Columbia, Florida), two of which (Maryland, Florida) host demonstration plans. A drug subsidy program for the poor may reduce the risk of adverse selection from offering drug coverage. On the other hand, existence of a drug discount program may be viewed as competition by a new PPO product whose niche is (in part) defined by drug benefits. In this regard, it is interesting that entry was more likely in states where proportionately more beneficiaries in existing M+C plans had prescription drug coverage (PBCARE).

In addition, theoretically, Medigap plans or employer sponsored coverage may be related to PPO entry because beneficiaries with these types of coverage may be less likely to consider enrollment in a Medicare managed care plan. States with higher proportions of the elderly with supplemental insurance (INDINSUR_01) or employer-provided insurance (EMPLOYERCPV) were significantly less attractive to the PPO entrants (other things constant). This suggests that in some states, the insurance climate among the elderly favors supplemental insurance held along with traditional Medicare, or a propensity for generous employer-sponsored retirement insurance. There are no states with high proportions of both types of insurance. States with high proportions of private Medigap plan prevalence are Iowa, Nebraska, South Dakota, North Dakota, and Montana, whereas states with high prevalence of employer-sponsored insurance are Delaware, Michigan, Ohio, and Hawaii.

Several plans stated in the site visits that they targeted areas with higher numbers or the near-elderly already familiar with managed care, and pegged their premiums to be competitive with Medigap Plan F (which is most popular with the elderly among alternative Medigap plans). States with higher Plan F premiums (holding constant Medicare HCC risk score, RISK01) would be expected to be more attractive places to enter. However, the estimated marginal impact of Medigap premiums is negative and significant, indicating that PPOs were <u>less</u> likely to enter in states with higher Medigap premiums. New York and New Jersey have much higher Plan F premiums than other states. In these states, the net effect of Plan F premiums is given by the sum of the Plan F premium effect (PLANF, estimated impact = -0.001) and the interaction of Plan F premium and a New York/New Jersey dummy variable (PLANF*NYNJDUM, estimated impact = 0.001). The net effect is close to zero, indicating little effect of the Medigap premium on entry in these two states.

Finally, hospital market competition had only an insignificant negative impact on the probability of entry (CINDEX), whereas insurance market concentration (LARGE3) had a significant, positive effect. In the constrained entry environment predicated by the necessity of quick start-up, larger and more dominant insurers may have had an entry advantage. However, holding other factors constant, there is little evidence that PPOs gravitated to areas where they might be able to negotiate better payment rates with hospitals.

## SECTION 4
## PPO PREMIUMS, BENEFITS, COST SHARING, AND PHYSICIAN NETWORKS

This chapter examines PPO premiums, benefits, cost sharing, out-of-pocket costs, and physician network size, and compares them with competing CCPs, original Medicare FFS, and FFS supplemented with Medigap (comparisons with FFS and FFS plus Medigap are for selected characteristics). The Medicare plan data are from April 2004 and reflect the premium reductions and benefit enhancements resulting from the increased payments to health plans mandated by MMA, which took effect in March 2004.

### 4.1 Premiums

The distribution of monthly premiums for PPO plans as well as competing CCP and Medigap F plans[38] is shown in ***Table 4-1*** and ***Figure 4-1***. PPO premiums range from $0 to $227, but over half are between $51 and $100. On average, PPOs charge more than twice as much as competing CCPs: $76 versus $29. About half of competing CCPs have no monthly premium, whereas all but two of 61 PPO plans charge a monthly premium. Consequently, the typical (median) PPO premium is $69 per month, whereas the typical competing CCP does not charge a premium. PPOs charge about $50 less than Medigap F, which usually costs between $101 and $150 per month. In sum, PPOs are a midrange product, costing more than HMOs because of PPOs' out-of-network coverage, but less than Medigap because PPOs impose greater beneficiary cost sharing, especially for out-of-network providers.

### 4.2 Benefits

This section describes the prescription drug and other benefits offered by PPO plans and competing CCPs both in and out of network.

*Prescription Drugs*

As shown in ***Table 4-2***, most PPO plans offer an outpatient prescription drug benefit (82 percent of plans, and 91 percent of contracts offer at least one plan with a drug benefit). PPOs are more likely than competing CCPs to offer a drug benefit (82 versus 70 percent). However, when offered, the PPO drug benefit is less generous on average than that of competing CCPs. Only 42 percent of PPO drug benefits cover brand drugs, compared with 53 percent of CCP benefits. Of plans covering generic drugs only, about one third of PPO plans offer unlimited generics compared with about two thirds of CCPs. When there is a benefit maximum, it is typically $500 per year[39] in PPO plans compared with $800 in CCPs. The typical (median) brand-only maximum in PPO plans is $600 compared with $900 in CCPs.

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[38] Medigap plan F was selected for comparison because it is the most popular of the standardized Medigap plans, with 37 percent of enrollment in these plans (MedPAC, 2003). Medigap F covers most Medicare cost sharing but has no prescription drug benefit.

[39] Benefit maximums may be specified for periods other than one year (e.g., quarterly), but all maximums were annualized for comparability.

**Table 4-1**
**PPO and competing CCP and Medigap premiums[1,2]**

| | PPO | | CCP | | Medigap F | |
|---|---|---|---|---|---|---|
| | Plans | % | Plans | % | States | % |
| Total | 61 | 100% | 232 | 100% | 21 | 100% |
| Monthly Premium Range | | | | | | |
| $0 | 2 | 3 | 121 | 52 | 0 | 0 |
| 1-25 | 2 | 3 | 20 | 9 | 0 | 0 |
| 26-50 | 10 | 16 | 33 | 14 | 0 | 0 |
| 51-75 | 24 | 39 | 23 | 10 | 0 | 0 |
| 76-100 | 11 | 18 | 23 | 10 | 1 | 5 |
| 101-150 | 8 | 13 | 10 | 4 | 17 | 81 |
| 150+ | 4 | 7 | 2 | 1 | 3 | 14 |
| Maximum | $227 | | $170 | | $179 | |
| Minimum | $0 | | $0 | | $96 | |
| Range | $227 | | $170 | | $83 | |
| Mean (unweighted) | $76 | | $29 | | $125 | |
| Median | $69 | | $0 | | $114 | |

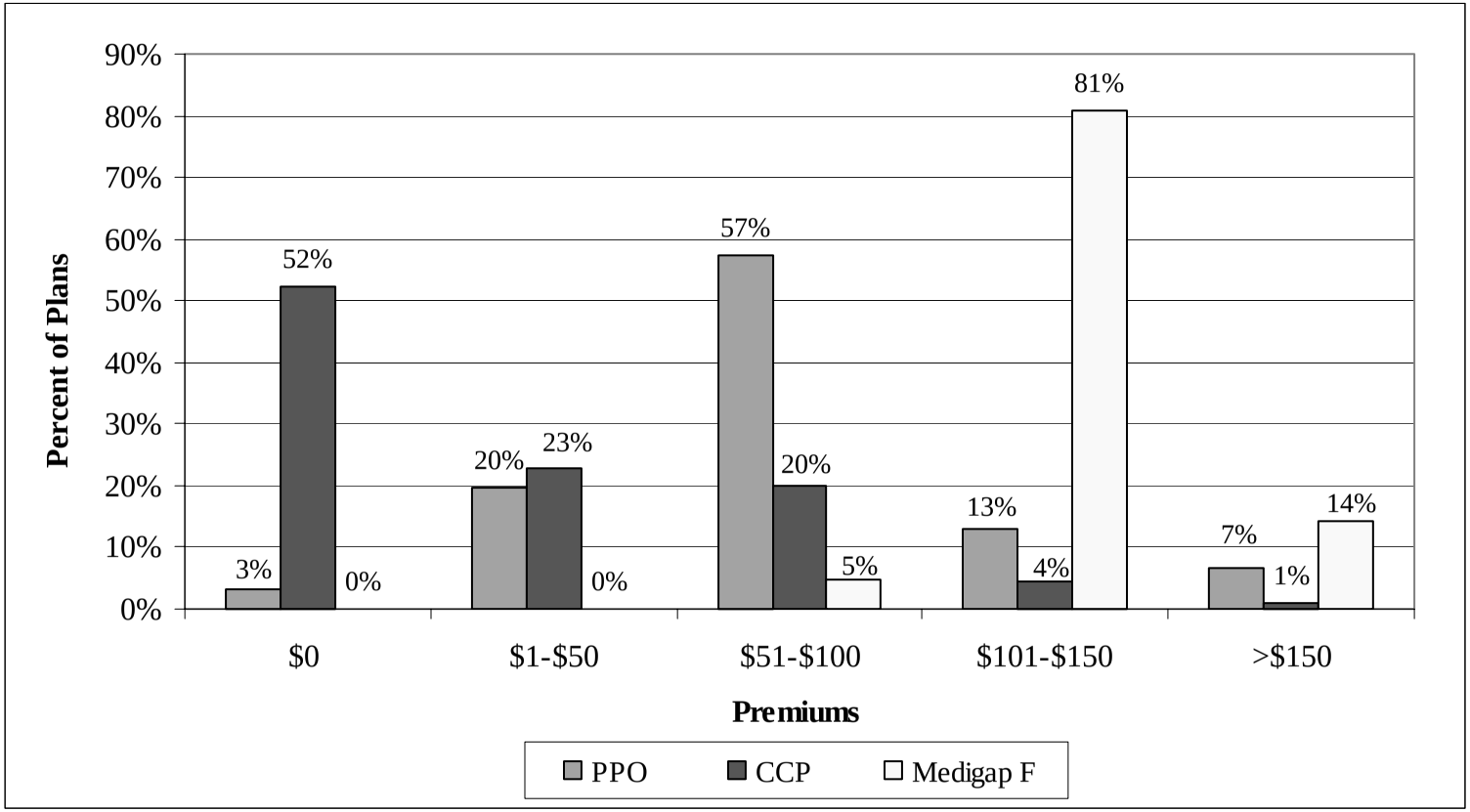
[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCP plans are offered in at least one PPO service area county.

[2] Medigap premiums are for the AARP's Medigap Plan F in each of the 21 states in which demonstration PPOs are offered.

NOTE: Computer Output - eo002_rr.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Figure 4-1**
**PPO, and competing CCP and Medigap Plan F monthly premiums**




NOTE: PPO is PPO demonstration plans. CCP is coordinated care plans. Excludes Part B only and employer-only plans. Competing plans are available in at least one PPO service area county.

SOURCE: RTI analysis of CMS HPMS April 2004 file and AARP Medigap premiums.

**Table 4-2**
**PPO and competing CCP prescription drug benefits[1,2]**

| | PPOs | | | | CCPs | | | |
|---|---|---|---|---|---|---|---|---|
| | N | $ | % of all plans | % w/drug benefit | N | $ | % of all plans | % w/drug benefit |
| Total contracts | 35 | -- | 100.0% | -- | 82 | -- | 100.0% | -- |
| Total plans | 61 | -- | 100.0 | -- | 232 | -- | 100.0 | -- |
| Drug benefit - contracts | 32 | -- | 91.4 | 100.0% | 65 | -- | 79.3 | 100.0% |
| Drug benefit - plans | 50 | -- | 82.0 | 100.0 | 162 | -- | 69.8 | 100.0 |
| Generic Drug Coverage Only | 29 | -- | 47.5 | 58.0 | 76 | -- | 32.8 | 46.9 |
| No maximum | 10 | -- | 16.4 | 20.0 | 50 | -- | 21.6 | 30.9 |
| Maximum | 19 | -- | 31.1 | 38.0 | 26 | -- | 11.2 | 16.0 |
| Largest ($) | -- | 1,000 | -- | -- | -- | 1,500 | -- | -- |
| Median ($) | -- | 500 | -- | -- | -- | 800 | -- | -- |
| Smallest ($) | -- | 500 | -- | -- | -- | 180 | -- | -- |
| Brand Drug Coverage | 21 | -- | 34.4 | 42.0 | 86 | -- | 37.1 | 53.1 |
| No maximum | 3 | -- | 4.9 | 6.0 | 9 | -- | 3.9 | 5.6 |
| Maximum | 18 | -- | 29.5 | 36.0 | 77 | -- | 33.2 | 47.5 |
| Brand maximum, unlimited generics | 11 | -- | 18.0 | 22.0 | 47 | -- | 20.3 | 29.0 |
| Largest ($) | -- | 600 | -- | -- | -- | 3,900 | -- | -- |
| Median ($) | -- | 600 | -- | -- | -- | 900 | -- | -- |
| Smallest ($) | -- | 500 | -- | -- | -- | 250 | -- | -- |
| Brand and generic combination maximum | 7 | -- | 11.5 | 14.0 | 30 | -- | 12.9 | 18.5 |
| Largest ($) | -- | 3,000 | -- | -- | -- | 2,450 | -- | -- |
| Median ($) | -- | 1,000 | -- | -- | -- | 1,000 | -- | -- |
| Smallest ($) | -- | 500 | -- | -- | -- | 200 | -- | -- |
| Unlimited Generic After Combination Max[3] | 1 | -- | 1.6 | 2.0 | 4 | -- | 1.7 | 2.5 |

[1] Includes Part A and Part B plans only. Employer-only plans are excluded. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county.

[2] For plans offering brand drug coverage, benefit maximums may pertain to various combinations of brand, preferred brand, and generic drugs.

[3] "Unlimited generics after combination maximum" refers to plans that cover unlimited generics after a benefit maximum for a combination of drugs.

NOTE: Computer Output - ppo37b.lst, eo030c.lst
SOURCE: RTI analysis of CMS HPMS April 2004 file.

Typical brand and generic combination maximums in PPOs and competing CCPs are the same (i.e., $1,000).

PPOs told us it was important to have a drug benefit to attract enrollment (Greenwald et al., 2004). The MMA requires all Medicare managed care contracts to offer at least one plan with a drug benefit beginning in 2006.

*Out-of-Network Benefits*

As shown in ***Table 4-3a***, PPOs offer much more extensive out-of-network benefits than competing CCPs, few of which offer any out-of-network coverage. Out-of-network benefits is the major distinction between PPOs and HMOs. All demonstration plans cover a core set of major services out of network, including acute hospitalizations, outpatient hospital services, and primary care and specialist physician. Other standard Medicare benefits—such as skilled nursing facility stays, home health visits, and durable medical equipment—are covered by most, but not all, demonstration plans out of network. In the site-visit interviews (Greenwald et al., 2004), some demonstration plans described limitations on their out-of-network benefits and characterized themselves as "not true PPOs" but rather "point-of-service plans" or "HMOs with an out-of-network benefit." Health plan motivations for limiting out-of-network benefits could involve keeping costs down or better managing utilization.

*Supplemental In-Network Benefits*

In addition to out-of-network benefits, PPOs may provide richer in-network benefits than the standard Medicare fee-for-service benefit package. These supplemental benefits may take the form of either enhancements to a Medicare-fee-for-service covered benefit, such as covering skilled nursing stays without the Medicare-required prior hospital stay, or providing a benefit that is not part of the standard Medicare fee-for-service package, such as dental benefits. Supplemental in-network benefits are tabulated in ***Table 4-3b***.

The enhanced benefits profile of PPOs and competing CCPs is similar. Popular enhanced PPO and CCP benefits include non-Medicare-covered skilled nursing stays, psychiatry, health education/wellness, disease management, and routine physical examinations. Consistent with their greater out-of-network coverage, PPOs are more likely to provide worldwide emergency/urgent care coverage. PPOs are also somewhat more likely than CCPs to cover routine chiropractic care, although it is not commonly covered in either PPOs or CCPs. CCPs are more likely to provide health club/fitness classes, nutritional training, and smoking cessation.

Among benefits not covered by Medicare, most PPOs provide a vision benefit, a majority offer a hearing benefit, and one third provide a dental benefit. But a lower proportion of PPOs than competing CCPs provide vision, hearing, and dental benefits. For example, less than one quarter of PPOs cover hearing aids, compared with over half of competing CCPs. Offering richer benefits in addition to their out-of-network coverage does not appear to be part of PPOs' strategy to attract enrollees. Instead, they may be restraining other benefits to keep premiums down or fund the costs associated with their out-of-network benefit.

**Table 4-3a**
**Out-of-network benefits provided by PPOs and competing CCPs[1]**

| | PPO | | CCP | |
|---|---|---|---|---|
| | (#) | (%) | (#) | (%) |
| Total number of plans | 61 | 100.0 | 232 | 100.0 |
| Inpatient Hospital - Acute | 61 | 100.0% | 6 | 2.6% |
| Inpatient Psychiatric Hospital | 50 | 82.0 | 6 | 2.6 |
| SNF - Medicare | 47 | 77.0 | 6 | 2.6 |
| SNF - Non-Medicare | 44 | 72.1 | 6 | 2.6 |
| CORF | 55 | 90.2 | 6 | 2.6 |
| Urgent Care | 37 | 60.7 | 5 | 2.2 |
| Partial Hospitalization | 52 | 85.2 | 6 | 2.6 |
| Primary Care Physician Services | 61 | 100.0 | 6 | 2.6 |
| Physician Specialist Services | 61 | 100.0 | 6 | 2.6 |
| Mental Health Specialty Services - Non-Psychiatric | 53 | 86.9 | 6 | 2.6 |
| Psychiatric Services | 53 | 86.9 | 6 | 2.6 |
| Podiatrist Services | 54 | 88.5 | 3 | 1.3 |
| Chiropractic Services | 46 | 75.4 | 3 | 1.3 |
| Occupational Therapy Services | 56 | 91.8 | 6 | 2.6 |
| Physical Therapy and Speech/Language Pathology Services | 56 | 91.8 | 6 | 2.6 |
| Other Health Care Professional Services | 52 | 85.2 | 6 | 2.6 |
| Outpatient Clin/Diag/Thera Rad Lab Services | 61 | 100.0 | 6 | 2.6 |
| Outpatient X-rays | 61 | 100.0 | 6 | 2.6 |
| Outpatient Hospital Services | 61 | 100.0 | 6 | 2.6 |
| Ambulatory Surgical Center (ASC) Services | 61 | 100.0 | 6 | 2.6 |
| Outpatient Substance Abuse Services | 53 | 86.9 | 6 | 2.6 |
| Outpatient Blood | 49 | 80.3 | 6 | 2.6 |
| Renal Dialysis | 57 | 93.4 | 6 | 2.6 |
| Cardiac Rehabilitation Services | 57 | 93.4 | 6 | 2.6 |
| Ambulance Services | 58 | 95.1 | 6 | 2.6 |
| Transportation Services | 8 | 13.1 | 3 | 1.3 |
| Durable Medical Equipment | 52 | 85.2 | 6 | 2.6 |
| Prosthetics/Medical Supplies | 50 | 82.0 | 6 | 2.6 |
| Diabetes Monitoring Supplies | 43 | 70.5 | 3 | 1.3 |
| Home Health Services | 45 | 73.8 | 6 | 2.6 |
| Acupuncture | 1 | 1.6 | 2 | 0.9 |
| Health Wellness Programs | 3 | 4.9 | 3 | 1.3 |
| Immunizations | 50 | 82.0 | 6 | 2.6 |
| Routine Physical Exams | 35 | 57.4 | 6 | 2.6 |
| Pap Smears and Pelvic Exams | 47 | 77.0 | 6 | 2.6 |
| Prostate Cancer Screening | 49 | 80.3 | 6 | 2.6 |
| Colorectal Screening | 49 | 80.3 | 6 | 2.6 |
| Bone Mass Measurement | 48 | 78.7 | 6 | 2.6 |
| Mammography Screening | 50 | 82.0 | 6 | 2.6 |
| Diabetes Monitoring Training | 52 | 85.2 | 3 | 1.3 |
| Outpatient Prescription Drugs - Medicare | 13 | 21.3 | 3 | 1.3 |
| Outpatient Prescription Drugs - Non-Medicare | 2 | 3.3 | 1 | 0.4 |
| Preventive Dental | 7 | 11.5 | - | 0.0 |
| Comprehensive Dental | 11 | 18.0 | 3 | 1.3 |
| Eye Exams | 49 | 80.3 | 4 | 1.7 |
| Eye Wear | 12 | 19.7 | 5 | 2.2 |
| Hearing Exams | 47 | 77.0 | 6 | 2.6 |
| Hearing Aids | 1 | 1.6 | - | 0.0 |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCP plans are offered in at least one PPO service area county.

NOTE: Computer Output - eo027.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table 4-3b**
**In-network supplemental benefits provided by PPOs and competing CCPs[1,2]**

| | PPO | | CCP | |
|---|---|---|---|---|
| | (#) | (%) | (#) | (%) |
| Total number of plans | 61 | 100.0 | 232 | 100.0 |
| Enhanced Benefit | | | | |
| Skilled Nursing Facility | 59 | 96.7 | 207 | 89.2 |
| Additional Days | 1 | 1.6 | 1 | 0.4 |
| Non-Medicare Covered Stay | 59 | 96.7 | 207 | 89.2 |
| Emergency Care/Urgent Care | 61 | 100.0 | 192 | 82.8 |
| Emergency Care, World Wide Coverage | 61 | 100.0 | 192 | 82.8 |
| Urgent Care, World Wide Coverage | 59 | 96.7 | 170 | 73.3 |
| Home Health Services | 0 | 0.0 | 5 | 2.2 |
| Custodial Care | 0 | 0.0 | 0 | 0.0 |
| Respite Care | 0 | 0.0 | 2 | 0.9 |
| Homemaking Services | 0 | 0.0 | 3 | 1.3 |
| Health Care Professional Services | 60 | 98.4 | 232 | 100.0 |
| Chiropractic, Routine Care | 11 | 18.0 | 22 | 9.5 |
| Podiatry, Routine Footcare | 34 | 55.7 | 127 | 54.7 |
| Psychiatry | 60 | 98.4 | 215 | 92.7 |
| Ambulance/Transportation Services | 7 | 11.5 | 35 | 15.1 |
| Transportation | 7 | 11.5 | 35 | 15.1 |
| Blood, Three-Pint Deductible Waived | 34 | 55.7 | 144 | 62.1 |
| Preventive Services | 61 | 100.0 | 232 | 100.0 |
| Health Education/Wellness Benefits | 51 | 83.6 | 201 | 86.6 |
| Health Education/Wellness | 25 | 41.0 | 115 | 49.6 |
| Newsletter | 34 | 55.7 | 154 | 66.4 |
| Nutritional Training | 11 | 18.0 | 92 | 39.7 |
| Smoking Cessation | 13 | 21.3 | 86 | 37.1 |
| Congestive Heart Program | 37 | 60.7 | 144 | 62.1 |
| Alternative Medicine Program | 1 | 1.6 | 12 | 5.2 |
| Membership in Health Club/Fitness Classes | 5 | 8.2 | 70 | 30.2 |
| Nursing Hotline | 37 | 60.7 | 110 | 47.4 |
| Disease Management | 43 | 70.5 | 165 | 71.1 |
| Immunizations | 15 | 24.6 | 59 | 25.4 |
| Routine Physical | 61 | 100.0 | 232 | 100.0 |
| PAP/Pelvic | 49 | 80.3 | 134 | 57.8 |
| Prostate Screening | 8 | 13.1 | 29 | 12.5 |
| Colorectal Screening | 23 | 37.7 | 54 | 23.3 |
| Bone Mass Measurement | 10 | 16.4 | 55 | 23.7 |
| Mammography | 8 | 13.1 | 23 | 9.9 |
| Diabetes Monitoring | 19 | 31.1 | 80 | 34.5 |

(continued)

**Table 4-3b (continued)**
**In-network supplemental benefits provided by PPOs and competing CCPs[1,2]**

| | PPO | | CCP | |
|---|---|---|---|---|
| | (#) | (%) | (#) | (%) |
| Benefit Not Covered by Medicare | | | | |
| Acupuncture | 1 | 1.6 | 12 | 5.2 |
| Dental | 20 | 32.8 | 100 | 43.1 |
| Preventive Dental | 20 | 32.8 | 98 | 42.2 |
| Oral Exams | 14 | 23.0 | 83 | 35.8 |
| Prophylaxis | 14 | 23.0 | 83 | 35.8 |
| Fluoride Treatment | 20 | 32.8 | 98 | 42.2 |
| Dental X-rays | 14 | 23.0 | 83 | 35.8 |
| Comprehensive Dental | 3 | 4.9 | 22 | 9.5 |
| Emergency Services | 3 | 4.9 | 22 | 9.5 |
| Diagnostic Services | 2 | 3.3 | 19 | 8.2 |
| Restorative Services | 2 | 3.3 | 19 | 8.2 |
| Endodontics/Periodontics/Extractions | 2 | 3.3 | 20 | 8.6 |
| Prosthodontics/Oral Surgery/Other | 2 | 3.3 | 19 | 8.2 |
| Eye Exams/Eye Wear | 53 | 86.9 | 219 | 94.4 |
| Eye Exams | 50 | 82.0 | 214 | 92.2 |
| Eye Wear | 31 | 50.8 | 174 | 75.0 |
| Contact Lenses | 27 | 44.3 | 167 | 72.0 |
| Eye Glass Lenses Frames | 30 | 49.2 | 167 | 72.0 |
| Eye Glass Lenses | 28 | 45.9 | 169 | 72.8 |
| Eye Glass Frames | 28 | 45.9 | 169 | 72.8 |
| Upgrades | 31 | 50.8 | 174 | 75.0 |
| Hearing Exams/Hearing Aids | 40 | 65.6 | 181 | 78.0 |
| Hearing Exams | 40 | 65.6 | 181 | 78.0 |
| Routine Hearing Exams | 40 | 65.6 | 181 | 78.0 |
| Fitting/Evaluation for Hearing Aid | 40 | 65.6 | 181 | 78.0 |
| Hearing Aids | 14 | 23.0 | 129 | 55.6 |
| Hearing Aids (All Types) | 12 | 19.7 | 124 | 53.4 |
| Hearing Aids (Inner Ear) | 14 | 23.0 | 129 | 55.6 |
| Hearing Aids (Outer Ear) | 14 | 23.0 | 129 | 55.6 |
| Hearing Aids (Over the Ear) | 14 | 23.0 | 129 | 55.6 |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCP plans are offered in at least one PPO service area county.

[2] Includes "additional" and "mandatory" benefits, excludes "optional" benefits (they require an extra premium).

NOTE: Computer Output - eo027a.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

## 4.3 Cost Sharing

*Hospital Inpatient*

***Table 4-4*** presents hospital inpatient cost sharing for PPOs and competing CCPs both in and out of network. Most PPO and competing CCPs use co-payments as their method of cost sharing for in-network inpatient hospital services. Co-payments per day are more common than co-payments per stay. Daily co-payments are typically lower in PPOs, which have a median daily co-payment of $100 versus $175 for competing CCPs. Daily co-pays are often limited to the first days of a stay (e.g., the first five days).[40] Among plans using a co-payment per stay, the median is $250 for both CCPs and PPOs. Some competing CCPs use a tiered network for hospital cost sharing, reducing co-payments to $0 for visiting a "preferred" network hospital. No demonstration PPOs appear to be using hospital tiering. A small percentage of plans use in-network coinsurance (generally 10 percent), and a similarly small percentage use an inpatient-hospital-specific deductible, typically $750 to $850. Thirteen percent of PPOs and 19 percent of competing CCPs do not require any cost sharing for in-network hospitalizations. Some plans have inpatient-specific or global in-network out-of-pocket maximums, which are discussed below in Section 4.4.

Over three quarters of PPOs use coinsurance for out-of-network cost sharing, as shown in Table 4-4. This coinsurance ranges from 10 to 30 percent, but is typically 20 percent. Ignoring global out-of-network deductibles (discussed below), and with the typical 20 percent coinsurance, a $5,000 out-of-network hospitalization would create a beneficiary liability of $1,000. About one fifth of PPOs require a co-payment per stay for out-of-network hospitalizations. The median out-of-network co-payment is $750, compared with the in-network median co-payment of $250. Only two PPO plans use a per day out-of-network co-payment. All PPOs require some out-of-network inpatient cost sharing. Most CCPs do not offer an out-of-network benefit. Some plans have out-of-network global out-of-pocket maximums, which are discussed below in Section 4.4.

*Hospital Outpatient*

***Table 4-5*** presents hospital outpatient cost sharing for PPOs and competing CCPs both in network and out of network. CCPs and PPOs structure their cost sharing differently for in-network outpatient services. PPOs are more likely (43 percent) to use coinsurance for cost sharing, whereas CCPs are more likely (55 percent) to use a co-payment. In-network coinsurance for PPO plans is typically 10 percent, compared with 20 percent among the minority of CCPs that use coinsurance. Where they exist, co-payments per outpatient visit are typically $50 for PPOs and $50 (minimum) to $100 (maximum) for CCPs.[41] One third of PPOs and 29

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[40] Plans may define multiple intervals of days during an inpatient stay and charge different co-payments for each of them. Table 4-4 indicates the daily co-payment for the first interval of days, which may be limited to 5 days, for example. A definitive comparison of PPO and CCP inpatient cost sharing would require examining the full structure of co-payments across all intervals, and the distribution of length of stay among inpatient stays.

[41] Our Plan Benefit Package data source collects the minimum and maximum copayment across the range of hospital outpatient services.

**Table 4-4**
**Hospital inpatient cost sharing by PPOs and competing CCPs[1]**

| | In-Network Services | | | | Out-of-Network Services | | | |
|---|---|---|---|---|---|---|---|---|
| | PPO | | CCP | | PPO | | CCP | |
| | N/$/% | % | N/$/% | % | N/$/% | % | N/$/% | % |
| Total Number of Plans (N) | 61 | 100.0 | 232 | 100.0 | 61 | 100.0 | 232 | 100.0 |
| Co-payment (N) | 47 | 77.0 | 181 | 78.0 | 14 | 23.0 | 0 | 0.0 |
| Co-payment Per Stay (N) | 18 | 29.5 | 54 | 23.3 | 12 | 19.7 | 0 | 0.0 |
| Max ($) | 375 | -- | 750 | -- | 876 | -- | -- | -- |
| Median ($) | 250 | -- | 250 | -- | 750 | -- | -- | -- |
| Min ($) | 100 | -- | 50 | -- | 250 | -- | -- | -- |
| Co-payment Per Day (N)[2] | 29 | 47.5 | 115 | 49.6 | 2 | 3.3 | 0 | 0.0 |
| Max ($) | 300 | -- | 400 | -- | 840 | -- | -- | -- |
| Median ($) | 100 | -- | 175 | -- | 545 | -- | -- | -- |
| Min ($) | 50 | -- | 0[3] | -- | 250 | -- | -- | -- |
| Co-payment Per Day with Co-payment Per Stay (N) | 0 | 0.0 | 7 | 3.0 | -- | -- | -- | -- |
| Coinsurance (N) | 3 | 4.9 | 7 | 3.0 | 47 | 77.0 | 6 | 2.6 |
| Max (%) | 10 | -- | 40 | -- | 30 | -- | 30 | -- |
| Median (%) | 10 | -- | 10 | -- | 20 | -- | 25 | -- |
| Min (%) | 10 | -- | 10 | -- | 10 | -- | 20 | -- |
| Deductible (N) | 3 | 4.9 | 10 | 4.3 | NA | -- | NA | -- |
| Max ($) | 750 | -- | 876 | -- | -- | -- | -- | -- |
| Median ($) | 750 | -- | 858 | -- | -- | -- | -- | -- |
| Min ($) | 100 | -- | 700 | -- | -- | -- | -- | -- |
| Deductible and coinsurance (N) | -- | -- | -- | -- | NA | -- | NA | -- |
| No Cost Sharing/Not Reported (N)[4] | 8 | 13.1 | 43 | 18.5 | 0 | 0.0 | 226 | 97.4 |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county. NA means not applicable.

[2] Co-payment per day is reported for the first-day interval of the inpatient stay. Plans may divide inpatient stays into multiple intervals of days and charge different co-payments for each of them.

[3] Eighteen CCPs have multitiered hospital networks. Beneficiaries visiting level 1 hospitals have a $0 co-payment. Tier 2 hospital visits have $250-$500 per day, or $1,500 per visit co-payments.

[4] Eight PPOs and 43 CCPs did not enter any information in the cost-sharing fields for in-network inpatient hospital services in the PBP survey; 226 CCPs do not offer out-of-network benefits.

NOTE: Computer Output - eo016.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

## Table 4-5
## Hospital outpatient cost sharing by PPOs and competing CCPs[1]

| | In-Network Services | | | | Out-of-Network Services | | | |
|---|---|---|---|---|---|---|---|---|
| | PPO | | CCP | | PPO | | CCP | |
| | N/$/% | % | N/$/% | % | N/$/% | % | N/$/% | % |
| Total Number of Plans (N) | 61 | 100.0 | 232 | 100.0 | 61 | 100.0 | 232 | 100.0 |
| Co-payment (N) | 15 | 24.6 | 128 | 55.2 | 1 | 1.6 | 0 | 0.0 |
| Co-payment Per Visit - Maximum (N) | 15 | 24.6 | 128 | 55.2 | 1 | 1.6 | 0 | 0.0 |
| Max ($) | 200 | -- | 400 | -- | 500 | -- | -- | -- |
| Median ($) | 50 | -- | 100 | -- | 500 | -- | -- | -- |
| Min ($) | 10 | -- | 15 | -- | 500 | -- | -- | -- |
| Co-payment Per Visit - Minimum (N) | 15 | 24.6 | 128 | 55.2 | 1 | 1.6 | 0 | 0.0 |
| Max ($) | 200 | -- | 250 | -- | 500 | -- | -- | -- |
| Median ($) | 50 | -- | 50 | -- | 500 | -- | -- | -- |
| Min ($) | 0 | -- | 0 | -- | 500 | -- | -- | -- |
| Coinsurance (N) | 26 | 42.6 | 42 | 18.1 | 51 | 83.6 | 4 | 1.7 |
| Coinsurance Maximum (N)[2] | | | | | | | | |
| Max (%) | 20 | -- | 20 | -- | 30 | -- | 30 | -- |
| Median (%) | 10 | -- | 20 | -- | 20 | -- | 20 | -- |
| Min (%) | 10 | -- | 5 | -- | 20 | -- | 20 | -- |
| Coinsurance Minimum (N) | | | | | | | | |
| Max (%) | 20 | -- | 20 | -- | -- | -- | -- | -- |
| Median (%) | 10 | -- | 20 | -- | -- | -- | -- | -- |
| Min (%) | 0 | -- | 0 | -- | -- | -- | -- | -- |
| Deductible (N) | 4 | 6.6 | 0 | 0.0 | 8 | 13.1 | 3 | 1.3 |
| Max ($) | 100 | -- | -- | -- | 300 | -- | 250 | -- |
| Median ($) | 100 | -- | -- | -- | 0 | -- | 250 | -- |
| Min ($) | 100 | -- | -- | -- | 0 | -- | 250 | -- |
| Deductible and Coinsurance (N) | 3 | 4.9 | 0 | -- | 8 | 13.1 | 3 | 1.3 |
| No Cost Sharing/Not Reported (N)[3,4] | 20 | 32.8 | 68 | 29.3 | 9 | 14.8 | 228 | 98.3 |

1 Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county.

2 For out of network, only a single coinsurance rate is reported, which is included here in the maximum rows.

3 Two PPOs and five CCPs reported a $0 co-payment, and 18 PPOs and 63 CCPs did not report any cost-sharing information for in-network outpatient services.

4 PPO plans did not report any outpatient out–of–network benefit cost-sharing information. One reported a $250 out-of-network deductible, but did not report it in the specified deductible field. Two reported coinsurance in the notes; one reported a coinsurance rate of 20% and the other 10%.

NOTE: Computer Output - eo016.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

percent of CCPs do not require any in-network cost sharing for hospital outpatient services, presumably to encourage substitution for inpatient services. Out-of-network outpatient services covered by PPOs generally require the Medicare fee-for-service level of 20 percent coinsurance, with a few plans requiring 30 percent.

*Primary Care Physician*

***Table 4-6*** depicts cost sharing for primary care physician (PCP) visits in PPOs and competing CCPs.[42] In-network cost sharing takes the form of co-payments per visit. Plans generally encourage utilization of PCPs as the point of access for services; therefore in-network co-payment rates for PCPs are usually low. The typical PCP co-payment is $10 for both PPOs and CCPs, with a slightly higher average. Out of network, over three quarters of PPOs impose cost sharing through coinsurance rather than co-payments. The standard coinsurance rate is 20 percent, the Medicare fee-for-service amount, but a few plans require 30 percent. A small number of PPOs require a co-payment for out-of-network PCP visits, which is typically $35; not surprisingly, much higher than the typical in-network $10 co-payment. Few CCPs offer any out-of-network coverage.

*Specialist Physician*

***Table 4-7*** indicates specialist physician cost sharing. Both PPOs and competing CCPs have higher co-payments for specialist physician than PCP visits; typically $20 versus $10. Median PPO and CCP co-payments are the same ($20), but mean CCP co-payments are slightly higher. Out of network, most PPOs impose the same 20 percent coinsurance that they do on PCP visits.

*Prescription Drugs*

The PBP allows health plans to describe benefit schemes for multiple categories of drugs. Cost-sharing structures are reported for each of the drug groups or "tiers" created by the health plan. In the PBP, health plans can define up to five cost-sharing packages for different groups of drugs. Each drug group is assigned a label of Generic, Brand, and/or Preferred Brand by the health plan. Some drug groups are mixed, allowing both generic and brand or preferred brand, but most groups separate generic and brand drugs. In the current analysis, each defined drug group is treated as a unique observation. If a drug group only contains generic drugs, it is assigned to the Generic category. If a drug group contains at least some brand drugs, it is assigned to the category of At Least Some Brand.

For generic-only drug groups, PPOs and CCPs typically charge a co-payment of $10 for a 30-day supply obtained at a network pharmacy (***Table 4-8***). For drug groups that contain at least some brand drugs, the median PPOs co-payment for a 30-day supply at a designated retail pharmacy is $37.50, whereas CCPs typically charge $30.00. On average, PPO co-payments are slightly higher than competing CCP co-payments for both generic and brand drug groups.

[42] Health plans are required to submit a maximum co-payment and a minimum co-payment for physician services.

**Table 4-6**
**Primary care physician visit cost sharing by PPO and competing CCPs[1]**

| | In-Network Services | | | | Out-of-Network Services | | | |
|---|---|---|---|---|---|---|---|---|
| | PPO | | CCP | | PPO | | CCP | |
| | N | Percent | N | Percent | N | Percent | N | Percent |
| Total plans[2] | 61 | 100 | 232 | 100 | 61 | 100 | 232 | 100 |
| With co-payment | 60 | 98 | 197 | 85 | 7 | 11 | - | 0 |
| With coinsurance | 0 | 0 | 0 | 0 | 47 | 77 | 4 | 2 |
| Mean Co-payment[3] ($) | 10.53 | | 10.57 | | 31.43 | | - | |
| Co-payment Distribution:[3] | | | | | | | | |
| Maximum ($) | 20 | | 25 | | 35 | | - | |
| Median ($) | 10 | | 10 | | 35 | | - | |
| Minimum ($) | 0 | | 0 | | 20 | | - | |
| Mean Coinsurance[4] (%) | - | | - | | 20.53 | | 22.50 | |
| Coinsurance Distribution:[4] | | | | | | | | |
| Maximum (%) | - | | - | | 30 | | 30 | |
| Median (%) | - | | - | | 20 | | 20 | |
| Minimum (%) | - | | - | | 20 | | 20 | |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CPP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county.

[2] Plans with co-payment or coinsurance is less than total plans because several plans did not report their cost sharing in their Plan Benefit Package in the standardized format. The cost sharing of these plans is not reflected in this table.

[3] Among plans with co-payments. Both maximum and minimum co-payments are reported. Since they are very similar, only statistics for the minimums are reported.

[4] Among plans with coinsurance. Both maximum and minimum coinsurance are reported. Since they are very similar, only statistics for the minimums are reported.

NOTE: Computer Output - eo003.lst, eo019.lst

SOURCE: RTI International analysis of CMS HPMS April 2004 file.

**Table 4-7**
**Specialist physician visit cost sharing in PPOs and competing CCPs[1]**

| | In-Network Services | | | | Out-of-Network Services | | | |
|---|---|---|---|---|---|---|---|---|
| | PPO | | CCP | | PPO | | CCP | |
| | N | Percent | N | Percent | N | Percent | N | Percent |
| Total plans[2] | 61 | 100 | 232 | 100 | 61 | 100 | 232 | 100 |
| With co-payment | 60 | 98 | 212 | 91 | 8 | 13 | 0 | 0 |
| With coinsurance | 0 | 0 | 0 | 0 | 47 | 77 | 4 | 2 |
| Mean Co-payment[3] ($) | 18.17 | | 20.84 | | 35.00 | | -- | |
| Co-payment Distribution:[3] | | | | | | | | |
| Maximum ($) | 30 | | 40 | | 60 | | -- | |
| Median ($) | 20 | | 20 | | 35 | | -- | |
| Minimum ($) | 10 | | 0 | | 20 | | -- | |
| Mean Coinsurance[4] (%) | -- | | -- | | 20.53 | | 22.50 | |
| Coinsurance Distribution:[4] | | | | | | | | |
| Maximum (%) | -- | | -- | | 30 | | 30 | |
| Median (%) | -- | | -- | | 20 | | 20 | |
| Minimum (%) | -- | | -- | | 20 | | 20 | |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county. .

[2] Plans with co-payment or coinsurance is less than total plans because several plans did not report their cost sharing in their Plan Benefit Package in the standardized format. The cost sharing of these plans is not reflected in this table.

[3] Among plans with co-payments. Both maximum and minimum co-payments are reported. Since they are very similar, only statistics for the minimums are reported.

[4] Among plans with coinsurance. Both maximum and minimum coinsurance are reported. Since they are very similar, only statistics for the minimums are reported.

NOTE: Computer Output - eo003.lst, eo019.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table 4-8**
**PPO and competing CCP retail pharmacy prescription drug co-payments[1]**

| | PPO | CCP |
|---|---|---|
| Drug groups with generics only | | |
| Number of plans with generics-only drug groups | 48 | 155 |
| Number of generics-only drug groups, all plans | 56 | 187 |
| Co-payment per Prescription[2] | | |
| Mean | $13.34 | $11.37 |
| Max | $50.00 | $55.00 |
| Median | $10.00 | $10.00 |
| Minimum | $5.00 | $0.00 |
| Drug groups with at least some brand | | |
| Number of plans with brand drug groups | 20 | 81 |
| Number of brand drug groups, all plans | 33 | 154 |
| Co-payment per Prescription[2] | | |
| Mean | $32.83 | $29.02 |
| Max | $55.00 | $55.00 |
| Median | $37.50 | $30.00 |
| Minimum | $5.00 | $0.00 |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCP plans are offered in at least one PPO service area county.

[2] 30-day supply.

NOTE: Computer output - ppo37b.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

*Global Deductibles*

Global deductibles are not often used by either PPO or competing CCP plans for in-network services. ***Table 4-9*** indicates that only 3 of 61 PPO plans have a global in-network deductible, and only 6 of 232 CCPs have this deductible. However, 41 percent of PPOs impose a global deductible for out-of-network services. The out-of-network deductible ranges from $150 to $2,000 and is typically $250. CCPs rarely offer any out-of-network coverage and thus almost no CCPs have an out-of-network deductible.

## 4.4 Out-of-Pocket Maximums

Out-of-pocket maximums can play an important role in limiting total enrollee financial risk and the out-of-pocket costs of sicker enrollees. ***Table 4-10*** presents in-network and out-of-network out-of-pocket maximums for PPOs and competing CCPs. Only 24 of 61 (39 percent) PPOs have global in-network out-of-pocket maximums. Even fewer, 14 of 61 (23 percent), have global out-of-network out-of-pocket maximums. Among PPOs that have a global maximum, the in-network global out–of-pocket maximum is typically about $1,800. The out-of-network global out-of-pocket maximum is typically about $3,250, when it exists. A smaller percentage of competing CCPs than PPOs (30 versus 39 percent) offers an in-network global out-of-pocket maximum, and typically it is greater when it exists ($2,560 versus $1,800). Very few CCPs offer out-of-network coverage. Some plans—15 percent of PPOs and 20 percent of competing CCPs—offer inpatient-only in-network out-of-pocket maximums. These do not provide as comprehensive protection as a global maximum, but do limit beneficiary liability for the largest component of medical expenditures in network.

## 4.5 Out-of-Pocket Costs

Total beneficiary out-of-pocket costs for medical services include:

- premiums, both Medicare Part B and health plan;
- out-of-pocket expenditures for prescription drugs; and
- cost sharing, which includes deductibles, co-payments, and coinsurance for covered services other than drugs, and expenditures for noncovered services (which may be thought of as 100 percent cost sharing).

***Table 4-11*** and ***Figure 4-2*** indicate the simulated 2004 monthly total out-of-pocket costs and its three components for beneficiaries aged 70 to 74 enrolled in one of four plan types:

- PPOs (based on an in-network level of benefits/cost sharing),
- competing CCPs,
- FFS with no supplemental insurance, and
- FFS with Medigap plan F in states with demonstration PPOs.

CMS and its contractor Fu Associates simulated costs by self-reported beneficiary health status by applying health plan benefit and cost-sharing rules to medical services utilization profiles collected as part of CMS's Medicare Current Beneficiary Survey. RTI averaged simulated costs, unweighted, across all plans within a plan type—for example, across all 61 open-enrollment PPO

**Table 4-9**
**PPO and competing CCP global deductibles[1]**

| | In-Network | | | | Out-of-Network | | | |
|---|---|---|---|---|---|---|---|---|
| | PPO | | CCP | | PPO | | CCP[2] | |
| | N | % | N | % | N | % | N | % |
| Total Plans | 61 | 100.0 | 232 | 100.0 | 61 | 100.0 | 232 | 100. |
| Deductible | 3 | 4.9 | 6 | 2.6 | 25 | 41.0 | 3 | 1.3 |
| Mean[3] | $100 | -- | $350 | -- | $394 | -- | $250 | -- |
| Distribution[3] | | | | | | | | |
| Maximum | $100 | -- | $1,500 | -- | $2,000 | -- | $250 | -- |
| Median | 100 | -- | 100 | -- | 250 | -- | 250 | -- |
| Minimum | 100 | -- | 100 | -- | 150 | -- | 250 | -- |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county.

[2] Only six competing CCPs have an out-of-network benefit.

[3] For plans with a global deductible.

NOTE: Computer Output: eo012.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

## Table 4-10
## PPO and competing CCP enrollee out-of-pocket cost maximums[1,2]

| | In-Network | | | | Out-of-Network | | | |
|---|---|---|---|---|---|---|---|---|
| | PPO | | CCP[3] | | PPO | | CCP[3,4] | |
| | N | % | N | % | N | % | N | % |
| Total Plans | 61 | 100.0 | 228 | 100.0 | 61 | 100.0 | 228 | 100.0 |
| Out-of-Pocket Maximum | 32 | 52.5 | 110 | 48.2 | - | - | - | - |
| Global | 24 | 39.3 | 69 | 30.3 | 14 | 23.0 | 3 | 1.3 |
| Inpatient-only | 9 | 14.8 | 45 | 19.7 | NA[5] | - | NA[5] | - |
| Per Year | 7 | 11.5 | 27 | 11.8 | NA[5] | - | NA[5] | - |
| Per Stay | 2 | 3.3 | 17 | 7.5 | NA[5] | - | NA[5] | - |
| Per Benefit Period | 0 | 0.0 | 1 | 0.4 | NA[5] | - | NA[5] | - |
| Global and inpatient | 1 | 1.6 | 4 | 1.8 | NA[5] | - | NA[5] | - |
| Mean, Global Max[6] | $2,043 | - | $2,786 | - | $3,136 | - | $2,500 | - |
| Mean, Inpatient Max[6] | $639 | - | $1,131 | - | NA[5] | - | NA[5] | - |
| Per Year | $621 | - | $1,412 | - | NA[5] | - | NA[5] | - |
| Per Stay | $700 | - | $710 | - | NA[5] | - | NA[5] | - |
| Per Benefit Period | - | - | $700 | - | NA[5] | - | NA[5] | - |
| Distribution, Global Max[6] | | | | | | | | |
| Maximum | $5,000 | - | $5,000 | - | $5,000 | - | $2,500 | - |
| Median | 1,800 | - | 2,560 | - | 3,250 | - | 2,500 | - |
| Minimum | 800 | - | 500 | - | 2,400 | - | 2,500 | - |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county.

[2] Out-of-pocket maximums have been annualized.

[3] H-Number H3307 entered $85,000 as an annual out-of-pocket maximum both in network and out of network, and was therefore excluded from this analysis. This contract has four plans.

[4] Only six competing CCPs have out–of-network benefits.

[5] The HPMS/Plan Benefit Package does not collect information on out-of-network inpatient-only out-of-pocket maximums.

[6] Among plans with specified type of out-of-pocket maximum.

NOTE: Computer Output - eo001_rr.lst, eo004.lst; eo029.lst.

SOURCE: RTI analysis of CMS HPMS April 2004 file.

**Table 4-11**
**Simulated average monthly out-of-pocket costs by health status and plan type[1]: Beneficiaries aged 70 - 74**

| Cost Category | PPO | CCP | FFS | Medigap Plan F |
|---|---|---|---|---|
| Total Premiums[2] | $156 | $107 | $67 | $184 |
| Part B | 67 | 67 | 67 | 67 |
| Health plan | 89 | 41 | - | 118 |
| **Excellent health status** | | | | |
| Total Cost | 322 | 274 | 269 | 339 |
| Cost Sharing[3] | 59 | 59 | 83 | 35 |
| Inpatient, acute | 12 | 13 | 17 | - |
| Hospital outpatient | 1 | 1 | 3 | - |
| Physician, primary care | 2 | 2 | 4 | - |
| Physician, specialist | 5 | 6 | 10 | - |
| Other services[4] | 39 | 37 | 48 | 35 |
| Prescription Drugs | 108 | 108 | 120 | 120 |
| **Good health status** | | | | |
| Total Cost | 424 | 380 | 400 | 443 |
| Cost Sharing[3] | 65 | 69 | 108 | 32 |
| Inpatient, acute | 12 | 17 | 29 | - |
| Hospital outpatient | 1 | 1 | 3 | - |
| Physician, primary care | 3 | 3 | 7 | - |
| Physician, specialist | 7 | 9 | 15 | - |
| Other services[4] | 42 | 40 | 54 | 32 |
| Prescription Drugs | 204 | 204 | 227 | 227 |
| **Poor health status** | | | | |
| Total Cost | 632 | 613 | 741 | 604 |
| Cost Sharing[3] | 120 | 147 | 277 | 22 |
| Inpatient, acute | 46 | 72 | 150 | - |
| Hospital outpatient | 1 | 2 | 6 | - |
| Physician, primary care | 5 | 5 | 9 | - |
| Physician, specialist | 13 | 16 | 34 | - |
| Other services[4] | 54 | 52 | 77 | 22 |
| Prescription Drugs | 358 | 360 | 398 | 398 |

[1] PPO is PPO demonstration plan. CCP is coordinated care plan. FFS is fee-for-service. Assumes in-network cost-sharing levels. Plan type costs are unweighted averages across plans of a given type. Excludes institutionalized beneficiaries.

[2] Included in total costs for each health status level. Premiums do not vary by health status level.

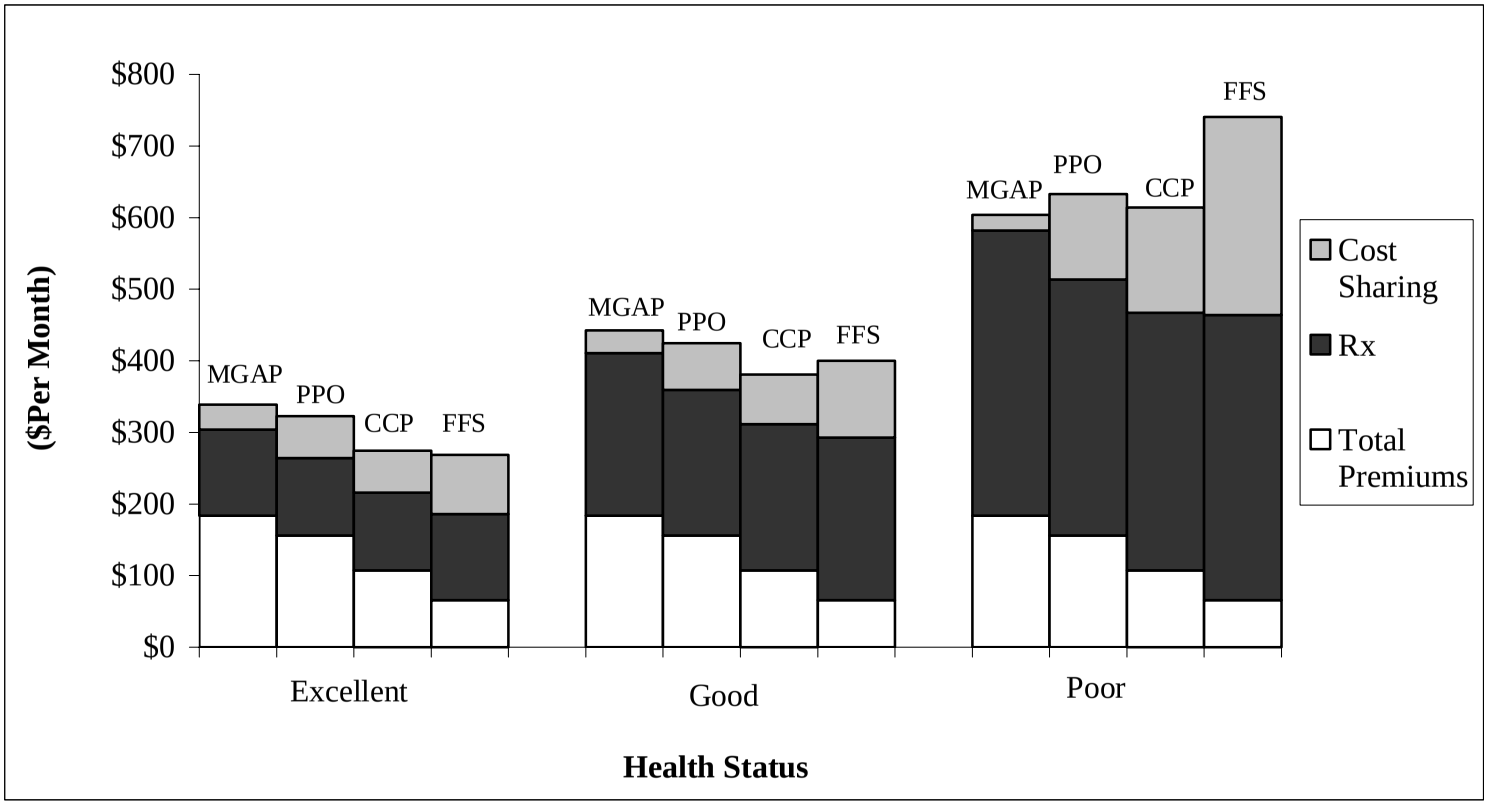
[3] Includes costs for noncovered services as well as cost sharing for covered services.

[4] Dental comprises a large share of this category, accounting for $20 to $30 at each plan type/health status level.

NOTE: Computer output - oop5.lst

SOURCE: RTI analysis of CMS 2004 out-of-pocket cost data.

**Figure 4-2**
**Simulated out-of-pocket cost by plan type: Beneficiaries aged 70-74**




NOTES: PPO is PPO demonstration plans. MGAP is competing Medigap Plan F. CCP is competing coordinated care plan. FFS is fee-for-service. Rx is prescription drugs. Total Premiums includes health plan and Medicare Part B premiums. Cost sharing includes costs for noncovered services. Assumes in-network cost-sharing levels. Plan type costs are unweighted averages across plans of a given type. Excludes institutionalized beneficiaries.

Computer output - oop5.lst

SOURCE: RTI analysis of CMS 2004 out of pocket cost data.

demonstration plans within the PPO plan type. Results are reported for beneficiaries in excellent, good, and poor health statuses. CMS- simulated cost data are also available for other age ranges and health statuses (e.g., very good, fair) of beneficiaries, but the patterns by plan type appear to be similar to those shown in Table 4-11 and Figure 4-2. The CMS out-of-pocket cost data provide a summary picture of the detailed information on health plan premiums and cost sharing for individual services presented earlier in this chapter.

*Results*

Premiums

Premiums are the same for each health status, but vary by plan type.[43] All beneficiaries represented in Table 4-11 and Figure 4-2 pay the 2004 monthly Part B premium of $66.60. This is the only premium for Medicare FFS. CCPs have the next lowest total premiums, averaging $107. If their health plan has a premium (some plans do not charge a premium), they pay that in addition to the Part B premium. On average, the total premiums for PPOs are $156; higher than that for CCPs. Medigap plan F has the highest total premiums, an average of $184.

Prescription drug costs

Prescription drug costs vary by plan type and health status. Medicare FFS and Medigap plan F have no prescription drug coverage and thus have equal out-of-pocket drug costs. The majority of PPOs and CCPs offer drug coverage, but it is limited by benefit maximums, restrictions on the type of drugs covered, co-payments, etc. The result is that drug coverage for PPOs and CCPs reduces enrollees' out-of-pocket expenses by only a small percentage compared with Medicare FFS. For example, for beneficiaries in good health, average monthly prescription drug expenditures are $227 for FFS and Medigap plan F, and $204 for PPOs and CCPs, a reduction of only 10 percent. Put another way, for beneficiaries in good health, the average annual value of drug benefits in PPO and CCP plans (including plans with no benefit) is $23 multiplied by 12, or $276. Drug costs do rise steeply with poorer health. For example, enrollees in Medicare FFS pay an average of $120 monthly if they are in excellent health, $227 monthly if they are in good health, and $398 monthly if they are in poor health.

Cost sharing

The third component of total out-of-pocket costs, cost sharing (including costs for uncovered services), also varies by both health status and plan type. The Medigap F plan has the lowest cost sharing at each health status level, and its cost sharing does not rise with poorer health. Medigap F pays the Part A and Part B deductible, the Part B coinsurance, Part B balance billing, and virtually all other Medicare cost sharing. Its cost sharing consists of expenses for uncovered services (e.g., dental). On the other hand, Medicare FFS without supplemental

[43] Medigap premiums are sometimes risk rated by age, rising with older age. PPO, CCP, and FFS premiums are required to be the same for all ages. The Medigap premiums in this analysis are specific to the 70-74 year old age range. Medigap premiums may be more cost competitive relative to other plan types for younger age groups, and less cost competitive for older age groups.

insurance has the greatest cost sharing at each health status level. Its cost sharing grows the most rapidly as health worsens and utilization increases.

The cost sharing imposed by PPOs and CCPs is between that of Medigap F and FFS alone. For enrollees in excellent health, average PPO and CCP cost sharing is identical, $59 per month. As health worsens, and utilization rises, PPO cost sharing increases less rapidly than CCP cost sharing, as long as the PPO enrollee stays in network. For an enrollee in poor health, average monthly PPO cost sharing is $120 compared with $147 for CCPs. This is largely due to lower PPO inpatient cost sharing.

Total costs and risk protection

As a result of the interaction of the three components, the ranking of plan types by total out-of-pocket costs varies by health status. For beneficiaries in excellent health, FFS is the least expensive and Medigap F is the most expensive. For beneficiaries in good health, CCPs are the least expensive and Medigap is still the most expensive. For beneficiaries in poor health, Medigap is the least expensive and FFS is the most expensive. Thus, FFS provides the least protection against financial risk and Medigap the most.[44] The difference in total out-of-pocket costs between excellent and poor health statuses is $472 for FFS compared with $265 for Medigap F.

PPOs (and CCPs) occupy an intermediate position between FFS and Medigap in terms of out-of-pocket costs and risk protection. PPOs are less expensive than Medigap F for beneficiaries with excellent and good health status, but more expensive for beneficiaries in poor health status. PPO premiums and drug costs are lower than Medigap premiums and drug costs at each health status level, but cost sharing is higher and grows more rapidly, even if only in-network providers are used. On the other hand, PPOs are more expensive than FFS at excellent and good health status, but less expensive at poor health status. PPO premiums are always higher, but drug costs and cost sharing are lower and grow less rapidly as health and utilization worsens, gradually offsetting higher PPO premiums. PPOs expose enrollees to more financial risk as health declines than Medigap F (a difference in total out-of-pocket costs between excellent and poor health status of $310 versus $265 for Medigap), but less financial risk than FFS ($310 versus $472).

Because of the higher PPO premium, a beneficiary can expect to have higher out-of-pocket costs in a PPO than in a CCP at each health status level,. This is true even if no out-of-network providers are patronized. But the PPO/CCP difference narrows as health worsens because of lower PPO cost sharing for inpatient services.

Costs by detailed service

***Table 4-12*** presents simulated out-of-pocket costs by plan type and detailed service category for beneficiaries aged 70-74 self-reporting to be in poor health. This table provides more detail behind the cost sharing differences among plan types presented in Table 4-11, albeit

[44] By greater risk, we mean a larger increase in out-of-pocket expenditures as health status worsens. That is, beneficiaries are "at risk" for greater costs if their health declines.

**Table 4-12**
**Simulated average monthly out-of-pocket costs by plan type and service: Beneficiaries in poor health aged 70 - 74[1]**

| | PPO | CCP | FFS | Medigap Plan F |
|---|---|---|---|---|
| Total Cost | $632.44 | $613.03 | $740.67 | $603.94 |
| Service | | | | |
| Inpatient Hospital, Acute | 45.74 | 72.34 | 149.73 | 0.00 |
| Inpatient Psychiatric Hospital | 0.72 | 0.90 | 1.52 | 0.00 |
| Skilled Nursing Facility | 0.81 | 1.56 | 3.90 | 0.00 |
| Comprehensive Outpatient Rehabilitation Facility | 0.05 | 0.04 | 0.14 | 0.00 |
| Emergency Room | 2.89 | 2.86 | 3.57 | 0.00 |
| Urgent Care | 0.00 | 0.00 | 0.00 | 0.00 |
| Home Health Agency | 4.38 | 2.75 | 0.00 | 0.00 |
| Primary Care Physician | 5.16 | 5.28 | 9.48 | 0.00 |
| Chiropractic | 0.63 | 0.70 | 0.53 | 0.00 |
| Occupational Therapy | 0.02 | 0.02 | 0.03 | 0.00 |
| Physician Specialist | 13.01 | 16.14 | 34.34 | 0.00 |
| Mental Health | 0.10 | 0.06 | 0.10 | 0.00 |
| Podiatrist | 1.15 | 1.23 | 1.00 | 0.00 |
| Other Health Professional | 0.15 | 0.12 | 0.16 | 0.00 |
| Psychiatrist | 0.32 | 0.24 | 0.66 | 0.00 |
| Physical and Speech Therapy | 0.41 | 0.43 | 0.41 | 0.00 |
| Lab | 2.47 | 1.40 | 3.13 | 0.00 |
| Radiation Therapy | 0.44 | 0.27 | 0.92 | 0.00 |
| X-ray | 0.93 | 0.88 | 3.46 | 0.00 |
| Comprehensive X-ray | 2.20 | 2.58 | 4.37 | 0.00 |
| Outpatient Hospital | 1.33 | 1.56 | 5.73 | 0.00 |
| Ambulatory Surgery Center | 2.00 | 2.61 | 7.55 | 0.00 |
| Substance Abuse | 0.00 | 0.00 | 0.00 | 0.00 |
| Cardiac Rehabilitation | 0.15 | 0.13 | 0.19 | 0.00 |
| Ambulance | 3.29 | 3.44 | 5.80 | 0.00 |
| Durable Medical Equipment | 8.14 | 7.23 | 13.43 | 0.00 |
| Prosthetics | 0.00 | 0.00 | 3.43 | 0.00 |
| Renal Dialysis | 0.00 | 0.00 | 0.00 | 0.00 |
| Pap Pelvic | 0.00 | 0.00 | 0.00 | 0.00 |
| Screen Mammography | 0.04 | 0.01 | 0.06 | 0.00 |
| Prescription Drugs | 357.58 | 359.70 | 398.01 | 398.01 |
| Medicare Covered Drugs | 0.73 | 0.64 | 0.67 | 0.00 |
| Preventive & Comprehensive Dental | 21.45 | 20.40 | 22.06 | 22.06 |
| Medicare Dental | 0.00 | 0.00 | 0.00 | 0.00 |
| Eye Exams | 0.35 | 0.30 | 0.33 | 0.00 |
| Eye Wear | 0.02 | 0.01 | 0.05 | 0.00 |
| Hearing Exams | 0.01 | 0.01 | 0.02 | 0.00 |
| Deductible | 0.54 | 1.15 | 0.00 | 0.00 |
| Part B Premium | 66.60 | 66.60 | 66.60 | 66.60 |
| Health Plan/Medigap Premium | 89.20 | 41.04 | 0.00 | 117.98 |

[1] PPO is PPO demonstration plans. CCP is coordinated care plans. FFS is fee-for-service. Assumes in-network cost sharing levels. Plan type costs are unweighted averages across plans of a given type. Excludes institutionalized beneficiaries.

NOTE: Computer output - OOP7.LST

SOURCE: RTI analysis of CMS 2004 out-of-pocket cost data.

only for a single health status level. Table 4-12 also summarizes in a single dollar figure the impact of the sometimes complex PPO and competing CCP cost- sharing rules discussed earlier in this chapter, and adds comparisons to FFS and FFS supplemented by Medigap plan F cost sharing. Like Table 4-11, Table 4-12 reflects in-network cost-sharing levels only.

Prescription drugs are by far the largest simulated out-of-pocket expense. For beneficiaries in poor health, the simulated average value of PPOs' drug benefits is $40.43 per month, or $485 per year. (This value is obtained by subtracting PPOs' average $357.58 monthly out-of-pocket cost from the $398.01 out-of pocket-cost of FFS, which has no drug coverage.) Nevertheless, PPOs cover only 10 percent of average prescription costs. On average, PPOs cover slightly more of prescription costs than CCPs. The average value of CCPs' drug benefits is $460 per year. As noted earlier in this chapter PPOs were more likely than CCPs to offer a drug benefit; but when offered, PPOs' benefit was less generous. The out-of-pocket cost data show that on average, including both plans that do and do not offer a drug benefit, PPOs cover slightly more of drug costs than competing CCPs.

Acute inpatient admissions are the second largest out-of-pocket expense. For acute inpatient admissions, the simulated in-network out-of-pocket costs of PPO enrollees are only 31 percent of FFS costs, and 63 percent of competing CCP costs. However, Medigap F enrollees pay nothing for inpatient admissions or for any service other than prescription drugs and dental.

Dental is the third largest source of out-of-pocket health costs. On average, PPOs' and CCPs' dental benefits are only of slight value, with the CCP benefit being slightly more generous on average than the PPO benefit.

Utilization of physician specialist services is the fourth largest source of out-of-pocket costs. PPOs' costs are 81 percent of CCP costs, and only 38 percent of FFS costs. Primary care physician expenses are only slightly lower in PPOs than CCPs, but both are much lower than FFS.

Among other services, the percentage reduction in PPO (and CCP) out-of-pocket costs versus FFS is especially large for skilled nursing facility, hospital outpatient, and ambulatory surgery center. This is presumably to encourage substitution of these services for expensive acute-care hospital inpatient stays. In contrast, PPO and CCP cost sharing for emergency-room visits is higher relative to FFS, as managed care plans discourage them. Also, CCPs and PPOs charge enrollees for home health visits, which are free to qualifying FFS enrollees.

Among major expense categories, PPO in-network cost sharing is notably lower than CCP cost sharing for hospital inpatient and skilled nursing facility, but is higher for home health, laboratory, and durable medical equipment (DME). Among services, PPOs may particularly want to encourage in-network inpatient use to avoid large, undiscounted, unmanaged out-of-network inpatient expenditures. The reason(s) for higher PPO home health, laboratory, and DME cost sharing is not entirely obvious. One hypothesis is that these frail beneficiaries are high utilizers of services, and may be particularly likely to have established provider relationships. Therefore, PPOs may expect them to be high users of undiscounted out-of-network services, creating added expense for the plan. Higher cost sharing for home health and DME at least partially offsets these costs and may discourage enrollment of mobility impaired

beneficiaries. Like CCPs, PPOs impose copayments on home health and laboratory tests, which have no cost sharing in FFS for covered services, to curtail excessive demand for these services.

## 4.6 Network Size and Referral Requirements

Health plans with larger physician networks may be more attractive to beneficiaries because they give beneficiaries greater choice of physicians. In addition to an out-of-network benefit, PPOs could provide enrollees with greater physician choice through a larger network of doctors. The distribution of PPO and competing CCP plans by their network size is shown in ***Table 4-13***. The distribution of PPO network sizes is fairly similar to the distribution of competing CCP network sizes, with no evidence of larger PPO networks. The median network size category is slightly smaller for PPOs than for competing CCPs, 1,001 to 1,500 physicians versus 1,501 to 2,000 physicians.[45] A smaller proportion of PPO networks than competing CCP networks are small or large (33 versus 37 percent of networks with fewer than 1,000 physicians and 18 versus 25 percent with more than 5,000 physicians), and a larger proportion are moderate-sized (48 percent versus 38 percent with 1,001 to 5,000 physicians). PPO and CCP network sizes may be similar because many managed care organizations in this demonstration used the established networks of their HMO plans to create their PPO networks (Greenwald et al., 2004). Both PPO and CCP networks vary substantially in size. One third of PPOs have fewer than 1,000 physicians in their networks, whereas 15 percent have more than 9,000 network physicians .[46]

In addition to network size, an aspect of access to physicians in a health plan is whether or not referrals from a primary care "gatekeeper" physician are required for specialist visits. The contrast in referral policies between PPOs and competing CCPs is shown in ***Table 4-14***. Seventy-two percent of CCPs require referrals for a specialist visit compared with only 10 percent of PPOs. In terms of not requiring referrals, PPOs provide greater access to specialists than CCPs.

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[45] Physician network size is reported in categories (ranges). A larger number of smaller categories is used than the aggregated categories shown in Table 4-12.

[46] We did not adjust plan network size for plan service area size or number of enrollees. The size of a plan's service area or its number of enrollees may explain some of the differences in network size. As PPO enrollment grows, PPO network size may rise.

**Table 4-13**
**Distribution of PPOs and competing CCPs by physician network size[1]**

| | PPO | | CCP | |
|---|---|---|---|---|
| | N | % | N | % |
| Total Number of Plans | 61 | 100.0 | 232 | 100.0 |
| Information on Physician Network Size | | | | |
| Yes | 60 | 98.4 | 232 | 100.0 |
| No | 1 | 1.6 | 0 | 0.0 |
| Physician Network Size (# of physicians) | | | | |
| <1,000 | 20 | 33.3 | 86 | 37.1 |
| 1,001-2,500 | 17 | 28.3 | 51 | 22.0 |
| 2,501-5,000 | 12 | 20.0 | 38 | 16.4 |
| 5,000-9,000 | 2 | 3.3 | 15 | 6.5 |
| 9,001+ | 9 | 15.0 | 42 | 18.1 |
| Median physician network size[2] | 1,001 - 1,500 | | 1,501 - 2,000 | |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county.

[2] Physician network size is reported in a larger number of categories (ranges) than the aggregated categories shown in the table.

NOTE: Computer Output - eo006.lst, eo006a.lst

**Table 4-14**
**Specialist visit referral requirements of PPOs and competing CCPs[1]**

| | In-Network Services | | | |
|---|---|---|---|---|
| | PPO | | CCP | |
| | N | Percent | N | Percent |
| Total plans | 61 | 100 | 232 | 100 |
| Referral required | 6 | 10 | 166 | 72 |

[1] Excludes Part B only and employer-only plans. PPO is PPO demonstration plan. CCP is coordinated care plan. Competing CCPs are offered in at least one PPO service area county.

NOTE: Computer Output - eo003.lst

SOURCE: RTI analysis of CMS HPMS April 2004 file.

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## SECTION 5
## PPO DEMONSTRATION ENROLLMENT AND ENROLLEE CHARACTERISTICS

This chapter examines enrollment in the PPO demonstration, first by looking at trends in overall enrollment and distribution of enrollment by demonstration contract. Then the market share of the PPO demonstration contracts is reviewed by service areas, and compared with CCPs, other Medicare health plans, and original FFS Medicare. In addition, the characteristics of PPO enrollees are examined, including prior enrollment status of PPO enrollees (e.g., another health plan, Medicare FFS, or recently enrolled in the Medicare program), demographic and other characteristics available from Medicare's Enrollment Database, and health status risk scores. Finally, disenrollment from the PPO demonstration is addressed.

### 5.1 Enrollment

*Enrollment Trends*

Enrollment in the PPO demonstration from its inception in January 2003 through August 2004[47] is shown in ***Figure 5-1***. Beginning enrollment in the demonstration was about 53,000 persons. A large proportion of this number (about 45,000 of the 53,000). was the result of the Horizon Healthcare of New Jersey[48] contract. Almost all of the initial Horizon enrollees transferred from a Horizon HMO product (Greenwald et al., 2004). The other 30 demonstration contracts effective January 1, 2003, accounted for less than 9,000 enrollees initially, an average of less than 300 per contract. Enrollment in the Horizon contract grew only slightly through the first 20 months of the demonstration. Enrollment in the other contracts grew more rapidly, in total surpassing Horizon by summer 2004; at which time there were 34 other demonstration contracts—two new contracts became effective September 1, 2003, and an additional two new contracts were effective January 1, 2004. By August 2004, total demonstration enrollment was nearly 105,000, with slightly more enrollees in other contracts than in Horizon. The growth in enrollment in the other contracts has remained steady at about the same rate throughout the demonstration, with the exception of a noticeable upward tick in early 2004 associated with the annual open-enrollment period. Lower premiums and/or enhanced benefits resulting from higher MMA-required Medicare payments to health plans, which took effect in April 2004, did not result in a noticeably higher rate of demonstration enrollment growth.

*Enrollment by Contract*

Enrollment in each PPO demonstration contract as of March 2004, sorted in descending order of enrollment is shown in ***Table 5-1***. Only one contract, Horizon, had more than 10,000 enrollees. An Aetna contract, also in New Jersey, had about 6,500 enrollees. Eight contracts had from 2,501 to 4,000 enrollees, 10 contracts had from 500 to 2,500 enrollees, and 15 contracts had

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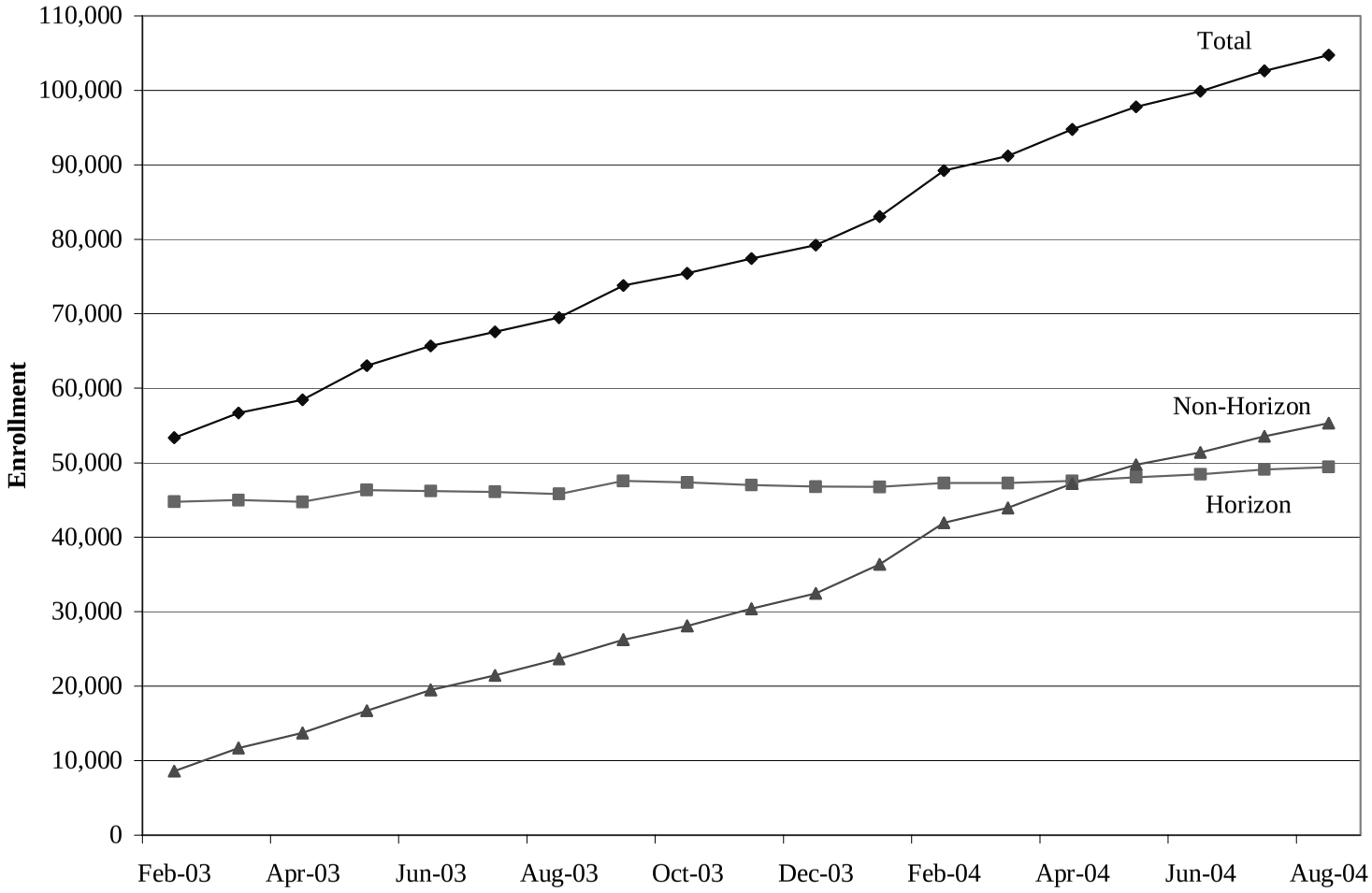
[47] The CMS Geographic Service Area file data do not fully reflect initial PPO enrollment until February 2003, so Figure 5-1 begins in February 2003 rather than January.

[48] Horizon Healthcare of New Jersey is a for-profit subsidiary of Horizon Blue Cross/Blue Shield of New Jersey.

**Figure 5-1**
**Enrollment in PPO demonstration**




SOURCE: RTI analysis of CMS Geographic Service Area file.

**Table 5-1**
**PPO enrollment by contract, March 2004: In descending order of enrollment**

| Enrollment Category | Contract[1] | | | |
|---|---|---|---|---|
| | H-Number | Organization name | State Name(s) | Enrollment[2] |
| >10,000 | 1 Contract | | | |
| | H3109 | Horizon Healthcare Of Nj, Inc. | New Jersey | 47,222 |
| 4,001 - 10,000 | 1 Contract | | | |
| | H3108 | Aetna Health Inc. | New Jersey | 6,429 |
| 2,501 - 4,000 | 8 Contracts | | | |
| | H1408 | Osf Healthplans, Inc. | Illinois | 3,829 |
| | H3323 | Group Health Incorporated | New York | 3,544 |
| | H3914 | Aetna Health Inc. | Pennsylvania | 3,456 |
| | H2110 | Aetna Health Inc. | Maryland | 3,265 |
| | H5401 | United Healthcare Insurance Company | Florida | 3,234 |
| | H1413 | United Healthcare Ins. Company, Inc. | Illinois, Missouri | 2,900 |
| | H3806 | Health Net Life Insurance Company | Oregon, Washington | 2,875 |
| | H3615 | Coventry Health And Life Ins. Company | Ohio, West Virginia | 2,509 |
| 501 - 2,500 | 10 Contracts | | | |
| | H3403 | United Healthcare Ins. Company, Inc. | North Carolina | 1,907 |
| | H0314 | Health Net Life Insurance Company | Arizona | 1,879 |
| | H3324 | Healthnow New York, Inc. | New York | 1,561 |
| | H5400 | United Healthcare Ins. Company, Inc. | Florida | 1,423 |
| | H3616 | United Healthcare Ins. Company, Inc. | Ohio | 910 |
| | H4103 | United Healthcare Ins. Company, Inc. | Rhode Island | 718 |
| | H0102 | United Healthcare Insurance Company | Alabama | 713 |
| | H0313 | Pacificare Of Arizona | Arizona | 621 |
| | H4404 | Healthspring, Inc. | Tennessee | 560 |
| | H1412 | Coventry Health And Life Ins. Company | Illinois, Missouri | 536 |

(continued)

**Table 5-1 (continued)**
**PPO enrollment by contract, March 2004: In descending order of enrollment**

| Enrollment Category | Contract[1] | | | |
|---|---|---|---|---|
| | H-Number | Organization name | State Name(s) | Enrollment[2] |
| 0-500 | 15 Contracts | | | |
| | H3326 | United Healthcare Ins. Company Of Ny, Inc. | New York | 477 |
| | H1508 | Advantage Health Solutions, Inc. | Indiana | 448 |
| | H3913 | Upmc Health Benefits, Inc. | Pennsylvania | 408 |
| | H1047 | Humana Insurance Company | Florida | 388 |
| | H1901 | Tenet Choices, Inc. | Louisiana | 311 |
| | H3618 | Community Insurance Company | Ohio | 241 |
| | H3617 | United Healthcare Ins. Company, Inc. | Ohio | 179 |
| | H0706 | Aetna Health Inc. | New York | 143 |
| | H2903 | Pacificare Of Nevada, Inc. | Nevada | 86 |
| | H3325 | Managed Health Inc. | New York | 43 |
| | H1805 | Anthem Health Plans Of Kentucky, Inc. | Kentucky | 41 |
| | H4403 | Cariten Insurance Company | Tennessee | 31 |
| | H0103 | United Healthcare Ins. Company, Inc. | Alabama | 23 |
| | H3915 | Health Assurance Pennsylvania, Inc. | Pennsylvania | 11 |
| | H1715 | Coventry Health And Life Ins. Company | Kansas, Missouri | 10 |
| Total | 35 Contracts | | | |

[1] All but four contracts were effective January 1, 2003. H1805 and H3618 were effective September 1, 2003; H0706 and H1715 were effective January 1, 2004.

[2] PPO enrollment includes beneficiaries with Part A and Part B coverage as of March 2004 residing in that contract's open-enrollment service area counties.

NOTE: Computer Output - y04a03c3_rr.lst

SOURCE: RTI analysis of the March 28, 2004 Medicare Enrollment Database.

fewer than 500 enrollees. In short, as of March 2004, enrollment in many PPO contracts was small.

*Enrollment by State*

PPO demonstration enrollment by state, as of March 2004, is presented in ***Table 5-2***. Because of the large Horizon contract, and the Aetna contract, New Jersey dominates PPO enrollment with 58 percent of the total. Excluding Horizon stayers,[49] New Jersey accounts for 25 percent of total demonstration enrollees. Medicare managed care penetration in New Jersey is low, and the PPO contracts account for a large share of it. Other than New Jersey, enrollment is not very concentrated by state. New York is the next highest enrollment state, with 6 percent of total enrollment, or 11 percent excluding Horizon stayers. Florida, Illinois, and Pennsylvania account for the next highest shares of demonstration enrollment.

## 5.2 Market Share

*National Market Share in Demonstration Service Area Counties*

Market share by plan type, as of March 2004, in counties of PPO demonstration contracts is shown in ***Table 5-3***. PPO contracts accounted for 1.0 percent of Medicare enrollment in their service area counties. CCP contracts had a 19.2 percent share of total enrollment. Other Medicare health plans accounted for an additional 1.8 percent of total enrollment. Original Medicare FFS had the largest market share, 78.0 percent,. PPO demonstration contracts accounted for 4.6 percent of total Medicare health plan enrollment and 5.1 percent of total CCP enrollment (CCP plus PPO enrollment).

*Market Share by Contract*

PPO market share by individual contract, in descending order of PPO market share, is shown in ***Table 5-4***. Only four contracts have more than a 1 percent market share in their service area counties. The demonstration contract with the largest market share in its service area is Horizon in New Jersey, with about 4 percent of total enrollment. Coventry in Ohio/West Virginia has a 3.5 percent market share in its two-county service area (Jefferson, Ohio and Hancock, West Virginia). OSF in Illinois and Aetna in Maryland are the other contracts with more than a 1 percent market share. Horizon has a larger market share than CCPs competing in its service

[49] "Horizon stayers" are current Horizon PPO demonstration enrollees who were enrolled in the Horizon HMO contract prior to January 1, 2003.

**Table 5-2**
**PPO demonstration enrollment by state, March 2004[1]**

| | Total | | Excluding horizon stayers[2] | |
|---|---|---|---|---|
| State of Residence | N | % | N | % |
| TOTAL | 93,177 | 100.0 | 52,648 | 100.0 |
| Alabama | 736 | 0.8 | 736 | 1.4 |
| Arizona | 2,514 | 2.7 | 2,512 | 4.8 |
| Florida | 5,124 | 5.5 | 5,092 | 9.7 |
| Illinois | 4,578 | 4.9 | 4,578 | 8.7 |
| Indiana | 448 | 0.5 | 448 | 0.9 |
| Kansas | 3 | 0.0 | 3 | 0.0 |
| Kentucky | 41 | 0.0 | 41 | 0.1 |
| Louisiana | 313 | 0.3 | 313 | 0.6 |
| Maryland | 3,267 | 3.5 | 3,266 | 6.2 |
| Missouri | 2,699 | 2.9 | 2,697 | 5.1 |
| Nevada | 94 | 0.1 | 91 | 0.2 |
| New Jersey | 53,690 | 57.6 | 13,235 | 25.1 |
| New York | 5,815 | 6.2 | 5,803 | 11.0 |
| North Carolina | 1,909 | 2.0 | 1,907 | 3.6 |
| Ohio | 2,348 | 2.5 | 2,348 | 4.5 |
| Oregon | 2,524 | 2.7 | 2,524 | 4.8 |
| Pennsylvania | 3,911 | 4.2 | 3,891 | 7.4 |
| Rhode Island | 718 | 0.8 | 718 | 1.4 |
| Tennessee | 592 | 0.6 | 592 | 1.1 |
| Washington | 357 | 0.4 | 357 | 0.7 |
| West Virginia | 1,496 | 1.6 | 1,496 | 2.8 |

[1] Includes beneficiaries with Part A and Part B coverage as of March 2004 residing in PPO service area counties. PPO is PPO demonstration plan. CCP is coordinated care plan. For CCP contracts, includes only that portion of their enrollment within the demonstration PPO service areas.

[2] Beneficiaries enrolled in Horizon HMO (Contract number H3154) prior to January 1, 2003, currently enrolled in the Horizon PPO product (Contract number H3109) were removed from this column.

NOTE: Computer Output - Y04A07YB.OUT

SOURCE: RTI analysis of the March 28, 2004 Medicare Enrollment Database

**Table 5-3**
**Enrollment by plan type, PPO demonstration service areas, March 2004[1]**

| Plan Type | Enrollment | Percent |
|---|---|---|
| TOTAL | 9,166,522 | 100.0 |
| Demonstration PPO | 93,177 | 1.0 |
| Coordinated Care Plan | 1,763,220 | 19.2 |
| *Health Maintenance Organization* | *1,517,658* | *16.6* |
| *HMO/HMO Point of Service* | *229,915* | *2.5* |
| *Non-Demonstration PPO* | *3,897* | *0.0* |
| *Provider Sponsored Organization (State License)* | *131* | *0.0* |
| *Provider Sponsored Organization (Federal Waiver of State License)* | *11,619* | *0.1* |
| Other Medicare Health Plan | 164,083 | 1.8 |
| *Private Fee-for-Service* | *2,264* | *0.0* |
| *Social Health Maintenance Organization* | *58,999* | *0.6* |
| *EverCare* | *4,858* | *0.1* |
| *Office of Research and Demonstrations Initiative* | *9* | *0.0* |
| *1876 Cost* | *56,293* | *0.6* |
| *Employer-Only Demonstration* | *2,105* | *0.0* |
| *PPO Alternative Pay Demonstration* | *11,474* | *0.1* |
| *PFFS Alternative Pay Demonstration* | *1* | *0.0* |
| *HCPP 1833 Cost* | *25,347* | *0.3* |
| *National PACE* | *2,733* | *0.0* |
| Fee-for-Service | 7,146,042 | 78.0 |

[1] Includes beneficiaries with Part A and Part B coverage as of March 2004, residing in the service area counties of any PPO demonstration contract.

NOTE: Computer Output - Y04A03CA.OUT, Y04A02KB.OUT

SOURCE: RTI analysis of March 28, 2004 Medicare Enrollment Database.

**Table 5-4**
**Market share by plan type, by PPO service area[1] (in descending order of PPO market share)**

| Contract | Organization Name | State | Service Area Market Share (%) | | | | |
|---|---|---|---|---|---|---|---|
| | | | Demo PPO | CCP | Other Plan | Other Demo PPO | FFS |
| TOTAL | | | 1.01 | 19.24 | 1.79 | NA | 77.96 |
| H3109 | HORIZON HEALTHCARE OF NJ,INC. | New Jersey | 4.12 | 3.10 | 0.10 | 0.56 | 92.11 |
| H3615 | COVENTRY HEALTH AND LIFE INS. COMPANY | Ohio, West Virginia | 3.52 | 15.95 | 3.94 | 0.07 | 76.52 |
| H1408 | OSF HEALTHPLANS, INC. | Illinois | 2.77 | 2.97 | 0.52 | 0.00 | 93.74 |
| H2110 | AETNA HEALTH INC. | Maryland | 1.08 | 1.03 | 2.24 | 0.00 | 95.65 |
| H3108 | AETNA HEALTH INC. | New Jersey | 0.84 | 3.05 | 0.13 | 3.40 | 92.59 |
| H3914 | AETNA HEALTH INC. | Pennsylvania | 0.82 | 24.53 | 3.18 | 0.01 | 71.46 |
| H1413 | UNITED HEALTHCARE INS. COMPANY, INC. | Illinois, Missouri | 0.81 | 21.70 | 0.74 | 0.15 | 76.59 |
| H3806 | HEALTH NET LIFE INSURANCE COMPANY | Oregon, Washington | 0.72 | 32.07 | 10.00 | 0.00 | 57.20 |
| H5401 | UNITED HEALTHCARE INSURANCE COMPANY | Florida | 0.53 | 18.59 | 0.31 | 0.07 | 80.50 |
| H4103 | UNITED HEALTHCARE INS. COMPANY, INC. | Rhode Island | 0.53 | 37.32 | 0.02 | 0.00 | 62.14 |
| H0102 | UNITED HEALTHCARE INSURANCE COMPANY | Alabama | 0.45 | 22.78 | 0.92 | 0.00 | 75.85 |
| H3403 | UNITED HEALTHCARE INS. COMPANY, INC. | North Carolina | 0.44 | 10.88 | 0.05 | 0.00 | 88.63 |
| H3324 | HEALTHNOW NEW YORK, INC. | New York | 0.38 | 24.74 | 0.04 | 0.00 | 74.84 |
| H3323 | GROUP HEALTH INCORPORATED | New York | 0.35 | 23.25 | 1.93 | 0.03 | 74.43 |
| H3616 | UNITED HEALTHCARE INS. COMPANY, INC. | Ohio | 0.31 | 15.17 | 0.16 | 0.07 | 84.29 |
| H0314 | HEALTH NET LIFE INSURANCE COMPANY | Arizona | 0.30 | 31.67 | 0.45 | 0.10 | 67.48 |
| H5400 | UNITED HEALTHCARE INS. COMPANY, INC. | Florida | 0.30 | 34.78 | 0.06 | 0.01 | 64.86 |
| H4404 | HEALTHSPRING, INC. | Tennessee | 0.27 | 12.48 | 0.18 | 0.00 | 87.06 |
| H1901 | TENET CHOICES, INC. | Louisiana | 0.21 | 32.49 | 0.13 | 0.00 | 67.18 |
| H1508 | ADVANTAGE HEALTH SOLUTIONS, INC. | Indiana | 0.18 | 2.98 | 0.19 | 0.00 | 96.65 |
| H1412 | COVENTRY HEALTH AND LIFE INS. COMPANY | Illinois, Missouri | 0.15 | 21.70 | 0.74 | 0.81 | 76.59 |
| H0313 | PACIFICARE OF ARIZONA | Arizona | 0.12 | 36.31 | 0.41 | 0.26 | 62.91 |
| H1805 | ANTHEM HEALTH PLANS OF KENTUCKY, INC. | Kentucky | 0.10 | 11.00 | 0.41 | 0.00 | 88.49 |
| H1047 | HUMANA INSURANCE COMPANY | Florida | 0.09 | 23.42 | 0.41 | 0.62 | 75.46 |
| H0706 | AETNA HEALTH INC. | New York | 0.09 | 12.76 | 0.26 | 0.40 | 86.50 |
| H3618 | COMMUNITY INSURANCE COMPANY | Ohio | 0.08 | 15.40 | 0.16 | 0.29 | 84.07 |
| H3617 | UNITED HEALTHCARE INS. COMPANY, INC. | Ohio | 0.07 | 15.14 | 6.29 | 0.00 | 78.50 |
| H3913 | UPMC HEALTH BENEFITS, INC. | Pennsylvania | 0.07 | 36.83 | 1.60 | 0.00 | 61.51 |
| H3326 | UNITED HEALTHCARE INS. COMPANY OF NY, INC. | New York | 0.05 | 22.40 | 2.03 | 0.31 | 75.21 |
| H2903 | PACIFICARE OF NEVADA, INC. | Nevada | 0.05 | 14.56 | 23.26 | 0.00 | 62.12 |
| H0103 | UNITED HEALTHCARE INS. COMPANY, INC. | Alabama | 0.04 | 19.58 | 0.25 | 0.00 | 80.14 |
| H4403 | CARITEN INSURANCE COMPANY | Tennessee | 0.01 | 12.64 | 0.34 | 0.00 | 87.01 |
| H1715 | COVENTRY HEALTH AND LIFE INS. COMPANY | Kansas, Missouri | 0.01 | 18.22 | 0.30 | 0.00 | 81.48 |
| H3325 | MANAGED HEALTH INC. | New York | 0.01 | 25.33 | 2.26 | 0.36 | 72.04 |
| H3915 | HEALTH ASSURANCE PENNSYLVANIA, INC. | Pennsylvania | 0.00 | 39.94 | 1.38 | 0.05 | 58.63 |

[1] Includes beneficiaries with Part A and Part B coverage as of March 2004. Market shares for each demonstration PPO calculated for beneficiaries residing in that contract's service area counties. CCP is coordinated care plan. FFS is fee-for-service.

NOTE: Computer Output - y04a03c3_rr_V2.lst

SOURCE: RTI analysis of the March 28, 2004 Medicare Enrollment Database.

area, and OSF and Aetna in Maryland have nearly as large market shares as competing CCPs. In all other areas, the CCP market share is at least several times the PPO market share, and in most cases is much larger. FFS has more than half the enrollees in all service areas. In a few areas—particularly the Las Vegas, Nevada area that has a large Social HMO—non-CCP Medicare health plans have a significant market share and are important competitors.

*Market Share Among Recent Medicare Enrollees*

Beneficiaries newly enrolling in the Medicare program may be a group for whom Medicare PPOs are an especially appealing choice because of their prior experience with commercial PPOs. Several demonstration plans indicated that they target new Medicare enrollees for PPO enrollment (Greenwald et al., 2004). More than 700,000 beneficiaries joined the Medicare program in demonstration counties between the demonstration's inception in January 2003 and March 2004. ***Table 5-5*** indicates that 1.0 percent of these recent Medicare enrollees were enrolled in a PPO demonstration contract as of March 2004. This is the same market share as demonstration plans had achieved over all beneficiaries. Hence, PPOs do not seem to have been especially attractive to beneficiaries aging into the Medicare program. Overall, Medicare health plans attracted 13 percent of recent Medicare enrollees, less than their overall 22 percent market share. FFS captured the lion's share (87 percent) of new enrollees. Of recent Medicare enrollees choosing to enroll in a Medicare health plan, 8 percent chose a PPO demonstration plan, 83 percent another CCP, and 9 percent another type of Medicare health plan. Hence, PPOs' share of recent Medicare enrollees choosing a Medicare health plan is higher than their overall share of health plan enrollment (4.6 percent), contributing to PPO enrollees' growth as a share of all health plan enrollees.

**Table 5-5**
**Plan choice of recent Medicare enrollees, PPO service areas[1]**

| Current Plan Type[2] | Total | Percent of Total | Percent of Health Plans[3] |
|---|---|---|---|
| Total | 744,549 | 100.0 | - |
| Medicare Health Plans, Total | 94,316 | 12.7 | 100.0 |
| Demonstration PPO | 7,781 | 1.0 | 8.2 |
| Coordinated Care Plan | 78,553 | 10.6 | 83.3 |
| Other Medicare Health Plans | 7,982 | 1.1 | 8.5 |
| Fee-for-Service | 650,233 | 87.3 | - |

[1] Includes beneficiaries who enrolled in the Medicare program January 1, 2003 or after, with Part A and Part B coverage as of March 2004, and residing in any PPO demonstration service area county.

[2] "Current" plan type reflects enrollment as of March 2004.

[3] Includes all Medicare health plans.

NOTE: Computer Output - Y04A09BA.OUT

SOURCE: RTI analysis of the March 28, 2004 Medicare Enrollment Database.

*Market Share Among Plan Switchers*

In addition to recent Medicare enrollees, a group of beneficiaries from which PPOs may draw enrollment is persons considering switching plans. Beneficiaries who consider switching but decide to remain with their current plan are not observed in administrative data. But PPO market share among beneficiaries who did switch plans--showing a willingness to change plans--can be examined. Of the 8.4 million beneficiaries[50] residing in demonstration service areas in March 2004 and Medicare-enrolled over the demonstration period (since January 1, 2003), 451,153 beneficiaries (5.4 percent) switched plans during the demonstration period (i.e., were not continuously enrolled in their March 2004 plan since January 1, 2003). "Switchers" includes both beneficiaries who switched from FFS to a Medicare health plan or vice versa, and beneficiaries who switched from one health plan contract to another.

Market share by plan type among switchers is shown in ***Table 5-6***. The 40,529 beneficiaries who switched from the Horizon HMO to the Horizon PPO are excluded from this analysis. PPOs captured 9.9 percent of all switchers (prior plan type = total, current plan type = demonstration PPO), 13.0 percent of beneficiaries who switched from FFS to a Medicare health plan (prior plan type = fee-for-service, current plan type = demonstration PPO), and 8.1 percent of beneficiaries who switched from a Medicare health plan to either FFS or another plan (prior plan type = Medicare health plan, current plan type = demonstration PPO). Among beneficiaries who switched from one health plan contract to another, PPOs captured 13.0 percent (prior plan type = Medicare health plan, current plan type = demonstration PPO, denominator excludes switchers from a Medicare health plan to FFS). These shares of switchers exceed PPOs' overall 1 percent market share, or 4.6 percent share of total Medicare health plan enrollment, in demonstration counties (not shown in Table 5-6), indicating a modest potential for further PPO market share growth.[51]

## 5.3 Prior Enrollment Status

*Prior Enrollment Status Nationally*

Prior enrollment status by plan type of current enrollees, as of March 2004, in combined PPO service areas is shown ***Table 5-7***. "Stayers" are enrollees who were in the same plan (FFS or same health plan contract) throughout the demonstration period: January 1, 2003 through March 2004. PPO stayers are enrollees in the Horizon (New Jersey) demonstration contract who were previously enrolled in the Horizon HMO. "Nonstayers" are recent plan enrollees (enrolled since January 1, 2003) who may consist of either recent Medicare program enrollees or plan switchers.

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[50] As of March 2004, 9,166,522 enrollees minus 744,549 recent Medicare enrollees equals 8,421,973 enrollees Medicare-enrolled since January 1, 2003. The 40,529 Horizon stayers are also excluded from this analysis. Horizon stayers are enrollees in the Horizon PPO demonstration contract as of March 2004 who were enrolled in the Horizon HMO prior to January 1, 2003.

[51] In addition to switchers, the other potential source of PPO enrollment growth is among recent Medicare program enrollees, but as discussed above, PPOs' share of recent program enrollees matches their overall market share (1 percent).

**Table 5-6**
**Market share among plan switchers by plan type, PPO service areas[1,2,3]**

| Current Plan Type | Total | | Prior Plan Type: Fee-for-service | | Prior Plan Type: Group health organization | | |
|---|---|---|---|---|---|---|---|
| Total | 451,153 | 100.0% | 169,563 | 100.0% | 281,590 | 100.0% | - |
| Medicare Health Plan, Total | 345,307 | 76.5 | 169,563 | 100.0 | 175,744 | 62.4 | 100.0% |
| Demonstration PPO | 44,867 | 9.9 | 22,041 | 13.0 | 22,826 | 8.1 | 13.0 |
| Coordinated Care Plan | 257,806 | 57.1 | 131,841 | 77.8 | 125,965 | 44.7 | 71.7 |
| Other Medicare Health Plan | 42,634 | 9.5 | 15,681 | 9.2 | 26,953 | 9.6 | 15.3 |
| Fee-for-Service | 105,846 | 23.5 | N/A | N/A | 105,846 | 37.6 | - |

[1] Includes beneficiaries with Part A and Part B coverage as of March 2004 residing in the service area counties of any PPO demonstration contract.

[2] Includes beneficiaries who were Medicare-enrolled since January 1, 2003, but not continuously enrolled in their March 2004 plan over that period.

[3] Excludes Horizon stayers, i.e., beneficiaries enrolled in the Horizon PPO demonstration contract as of March 2004 who were enrolled in the Horizon HMO prior to January 1, 2003.

NOTE: Computer output - Y04A09BA.OUT

SOURCE: RTI analysis of March 28, 2004 Medicare Enrollment Database.

**Table 5-7**
**Prior enrollment status by plan type, PPO service areas[1]**

| | Current Plan Type | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | PPO | | | CCP | | | FFS | | |
| Prior Plan Type | N | % Total | % Non-stayers | N | % Total | % Non-stayers | N | % Total | % Non-stayers |
| Total | 93,177 | 100.0 | - | 1,763,220 | 100.0 | - | 7,146,042 | 100.0 | - |
| Nonstayers, Total[2] | 52,648 | 56.5 | 100.0 | 336,359 | 19.1 | 100.0 | 756,079 | 10.6 | 100.0 |
| Recent Medicare Enrollee[3] | 7,781 | 8.4 | 14.8 | 78,553 | 4.5 | 23.4 | 650,233 | 9.1 | 86.0 |
| Fee for Service | 22,041 | 23.7 | 41.9 | 131,841 | 7.5 | 39.2 | - | - | - |
| Medicare Health Plans | 22,826 | 24.5 | 43.4 | 125,965 | 7.1 | 37.4 | 105,846 | 1.5 | 14.0 |
| Unaffiliated | 14,649 | 15.7 | 27.8 | - | - | - | - | - | - |
| Affiliated | 8,177 | 8.8 | 15.5 | - | - | - | - | - | - |
| Stayer[4] | 40,529 | 43.5 | - | 1,426,861 | 80.9 | - | 6,389,963 | 89.4 | - |

[1] Includes beneficiaries with Part A and Part B coverage as of March 2004, residing in the service area counties of any PPO demonstration contract. PPO is demonstration plan. CCP is coordinated care plan. FFS is fee-for-service.

[2] Beneficiaries who enrolled in their current plan January 1, 2003, or after.

[3] Beneficiaries who newly enrolled in the Medicare program January 2003 or after.

[4] Beneficiaries continuously enrolled in the same Medicare plan since December 2002. Includes beneficiaries currently enrolled in the Horizon PPO contract who were enrolled in the Horizon HMO contract prior to January 1, 2003.

NOTE: Computer output - Y04A09BA.OUT

SOURCE: RTI analysis of the March 28, 2004 Medicare Enrollment Database.

Excluding Horizon stayers, PPO enrollees as of March 2004 were previously enrolled as follows: 15 percent were recent Medicare enrollees, 42 percent were previously in FFS, and 43 percent were previously in other Medicare health plans. Recent (nonstayer) enrollees in competing CCPs derived from these sources in similar proportions: 23 percent from recent Medicare enrollees, 39 percent from FFS, and 37 percent from other Medicare health plans.

Some hypothesize that PPOs are more attractive to FFS beneficiaries than other CCPs (mostly HMOs) because of PPOs' greater freedom of provider choice. But PPOs are drawing about the same proportion of their enrollees from FFS as are CCPs. Also, PPOs are drawing a somewhat lower proportion of their enrollees than CCPs from recent Medicare enrollees, which is not consistent with the hypothesis that PPOs are especially attractive to Medicare age ins (i.e., new Medicare enrollees).[52]

*Enrollment from Affiliated Versus Unaffiliated Group Health Organizations*

Among enrollees that PPOs are drawing from other Medicare health plans, about two thirds (64 percent) were previously enrolled in unaffiliated health plans and about one third (36 percent) were previously enrolled in affiliated plans. An affiliated plan is a plan (typically an HMO) offered in the same market area by the same parent company that is sponsoring the demonstration PPO. For example, a United Healthcare Medicare HMO offered in the same service area as the United Healthcare demonstration PPO. Thus, the demonstration PPOs are not simply cannibalizing affiliated HMO enrollment. Only about 15 percent of total PPO enrollment derives from this source. Of course, if the beneficiaries who transferred from Horizon's HMO to its PPO demonstration contract were included as enrollees from an affiliated HMO, the proportion of demonstration enrollees drawn from an affiliated plan would be much greater.

## 5.4 Enrollee Characteristics

Enrollee characteristics by plan type in PPO service areas are shown in ***Table 5-8***.

*Age Distribution*

The age distribution of PPO enrollees is generally similar to that of competing CCPs. Considering only nonstayers (i.e., plan enrollees since demonstration inception in January 2003), a slightly lower percentage of PPO than CCP enrollees are age 65 to 69 (32 versus 39 percent), and a slightly higher percentage are age 70 to 74 (24 versus 19 percent), and age 75 to 84 (27 versus 23 percent). This is consistent with findings reported above that PPOs are not capturing a disproportionate share of the new Medicare enrollee or "age in" market. PPOs seem to be relatively more popular among the mid-range elderly (age 70 to 84). Six percent of PPO enrollees are the "oldest old" (age 85 or older), a share equal to that of recent (nonstayer) CCP enrollees, and half the 12 percent FFS share. The share of enrollees younger than age 65, most

[52] Beneficiaries age 65-69 comprise the bulk of recent Medicare program enrollees. It should be noted that a major source of Medicare health plan enrollment among this group is age-ins coming directly from an employer group account into an organization's Medicare plan. Though some of the Medicare demonstration PPOs may have an arrangement to enroll such beneficiaries, the existing M+C plans probably have an enrollment advantage for them. This may explain the lower proportion of PPO enrollees who are recent Medicare enrollees.

## Table 5-8
## Enrollee characteristics by plan type, PPO service areas[1]

| | PPO | | | | CCP | | | | FFS | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Excluding Horizon Stayers[2] | | Total | | Non-Stayer[3] | | | |
| | N | % | N | % | N | % | N | % | N | % |
| TOTAL | 93,177 | 100.0 | 52,648 | 100.0 | 1,763,220 | 100.0 | 336,359 | 100.0 | 7,146,042 | 100.0 |
| Age | | | | | | | | | | |
| < 64 | 7,922 | 8.5 | 6,152 | 11.7 | 139,025 | 7.9 | 42,843 | 12.7 | 1,225,631 | 17.2 |
| 65 to 69 | 22,382 | 24.0 | 16,728 | 31.8 | 381,094 | 21.6 | 130,741 | 38.9 | 1,486,921 | 20.8 |
| 70 to 74 | 25,761 | 27.6 | 12,453 | 23.7 | 445,413 | 25.3 | 63,396 | 18.8 | 1,319,648 | 18.5 |
| 75 to 84 | 29,992 | 32.2 | 14,068 | 26.7 | 618,314 | 35.1 | 78,596 | 23.4 | 2,259,982 | 31.6 |
| 85+ | 7,120 | 7.6 | 3,247 | 6.2 | 179,374 | 10.2 | 20,783 | 6.2 | 853,860 | 11.9 |
| Gender | | | | | | | | | | |
| Female | 53,561 | 57.5 | 29,875 | 56.7 | 1,028,256 | 58.3 | 191,244 | 56.9 | 4,112,741 | 57.6 |
| Male | 39,616 | 42.5 | 22,773 | 43.3 | 734,964 | 41.7 | 145,115 | 43.1 | 3,033,301 | 42.4 |
| Race | | | | | | | | | | |
| White | 85,215 | 91.5 | 47,831 | 90.9 | 1,503,541 | 85.3 | 275,929 | 82.0 | 6,074,978 | 85.0 |
| Black | 5,582 | 6.0 | 3,370 | 6.4 | 191,984 | 10.9 | 44,504 | 13.2 | 795,538 | 11.1 |
| Other | 973 | 1.0 | 633 | 1.2 | 21,437 | 1.2 | 6,058 | 1.8 | 91,619 | 1.3 |
| Asian | 559 | 0.6 | 299 | 0.6 | 16,271 | 0.9 | 3,712 | 1.1 | 54,169 | 0.8 |
| Hispanic | 705 | 0.8 | 422 | 0.8 | 26,308 | 1.5 | 5,489 | 1.6 | 106,703 | 1.5 |
| North American Native | 44 | 0.0 | 36 | 0.1 | 1,443 | 0.1 | 285 | 0.1 | 12,136 | 0.2 |
| Unknown | 98 | 0.1 | 56 | 0.1 | 2,234 | 0.1 | 381 | 0.1 | 10,884 | 0.2 |
| Medicaid Status | | | | | | | | | | |
| Not Medicaid Eligible | 90,733 | 97.4 | 51,446 | 97.7 | 1,634,542 | 92.7 | 309,793 | 92.1 | 6,113,709 | 85.6 |
| Medicaid Eligible | 2,444 | 2.6 | 1,202 | 2.3 | 128,678 | 7.3 | 26,566 | 7.9 | 1,032,333 | 14.4 |
| Entitlement Status | | | | | | | | | | |
| Aged Beneficiaries | 85,051 | 91.3 | 46,420 | 88.2 | 1,619,671 | 91.9 | 293,225 | 87.2 | 5,891,642 | 82.4 |
| Disabled Beneficiaries | 7,847 | 8.4 | 6,101 | 11.6 | 137,550 | 7.8 | 42,583 | 12.7 | 1,182,631 | 16.5 |
| ESRD Eligible Beneficiaries | 279 | 0.3 | 127 | 0.2 | 5,999 | 0.3 | 551 | 0.2 | 71,769 | 1.0 |
| Medicare Secondary Payer Status | | | | | | | | | | |
| Non-Working Aged | 91,592 | 98.3 | 51,155 | 97.2 | 1,744,868 | 99.0 | 326,446 | 97.1 | 6,979,072 | 97.7 |
| Working Aged | 1,585 | 1.7 | 1,493 | 2.8 | 18,352 | 1.0 | 9,913 | 2.9 | 166,970 | 2.3 |

[1] Includes beneficiaries with Part A and Part B coverage as of March 2004, residing in any PPO demonstration service area county. PPO is PPO demonstration plan. CCP is coordinated care plan. FSS is fee-for-service.

[2] Beneficiaries enrolled in Horizon HMO prior to January 1, 2003, currently enrolled in the Horizon PPO product were removed from this column.

[3] Beneficiaries enrolling in their current CCP on or after January 1, 2003 are included in this column.

NOTE: Computer Output - Y04A09KA.OUT

SOURCE: RTI analysis of March 28, 2004 Medicare Enrollment Database.

of whom are entitled by disability,[53] is nearly the same among PPO and recent CCP enrollees (12 and 13 percent, respectively). This is not consistent with the hypothesis that PPOs are especially attractive to disabled beneficiaries who may have difficulty obtaining Medigap supplemental coverage, but want to avoid the provider access restrictions of HMOs.

*Other Enrollee Characteristics*

As indicated in Table 5-8, a smaller share of PPO enrollees than recent competing CCP enrollees are black (6 versus 13 percent, respectively). The reasons for this are not clear, but it may be related to the higher PPO than CCP monthly premiums, and lower incomes among black than white beneficiaries. A smaller share of PPO enrollees are on Medicaid; 2 versus 8 percent of recent competing CCP enrollees. Higher PPO premiums are presumably a barrier to poorer beneficiaries. Differences between PPO and CCP enrollee shares by Medicare entitlement (aged, disabled, ESRD), and working age statuses are small.

## 5.5 Enrollee Health Status

This section presents mean risk scores for beneficiaries residing in the PPO combined service areas. Risk scores are presented by plan type (PPO, CCP, FFS) and prior enrollment status (stayer, recent Medicare enrollee, switcher). The results address an important PPO demonstration evaluation question: How does the average health status of PPO enrollees compare with other Medicare beneficiaries? If PPO enrollees have lower-than-average risk scores, then the PPO is said to have experienced favorable selection. Additional analysis of biased selection will be presented in a future report. Risk score definition and interpretation are discussed first, followed by the presentation of the results.

*Risk Score Definition and Interpretation*

The CMS-HCC prospective risk adjustment model (Pope et al., 2004) is used to calculate the risk score, an expenditure-weighted index of a beneficiary's diagnoses that predicts the relative risk of future Medicare expenditures.[54] In the CMS-HCC model, a beneficiary's total predicted expenditures is the sum of the incremental predicted expenditures associated with each of his or her assigned diagnostic categories (CMS-HCCs) and demographic factors. A beneficiary's risk score is calculated by dividing predicted expenditures by per capita expenditures for the entire Medicare FFS population. A risk score above 1.0 indicates that a beneficiary is predicted to have greater future medical expenditures than the average Medicare FFS beneficiary (i.e., is sicker than average), whereas a risk score below 1.0 indicates the

[53] A small proportion are entitled by End Stage Renal Disease (ESRD).

[54] Risk scores for payment year 2004 are used in the analyses. Lagged diagnoses from June 2002 through July 2003 were used to calculate predicted expenditures. For beneficiaries with a completed diagnostic profile during this period, the CMS-HCC community risk score was used. Because long-term institutional status is a payment year adjuster in the CMS-HCC model, long-term institutional status could not be identified for the analysis. For beneficiaries without a completed diagnostic profile during this period, the CMS new enrollees demographic risk score was used.

beneficiary is predicted to have lower-than-average future health care costs ( i.e., is healthier than average).

In short, the risk score is a summary index of a beneficiary's diagnostic disease profile or burden, incorporating both numbers and severity of serious disorders. Multiple diseases are aggregated into a single index score using the metric of their impact on future medical expenditures. The CMS-HCC risk score has been shown to be strongly correlated with self-reported measures of health status, such as self-rated global health status, limitations in activities of daily living, and SF-36 physical and mental health component scores (Pope et al. 1998; Kautter and Pope, 2001). It is used to adjust a portion of Medicare capitation payments to health plans for the health status of their enrollees.

*Health Status by Plan Type*

Mean risk scores by plan type and prior enrollment status for Medicare beneficiaries living within the PPO combined service areas are shown in ***Table 5-9***. As noted in the table, risk scores are available for a total of 8,644,881 beneficiaries. The mean risk score for all beneficiaries is 1.08, indicating that beneficiaries residing in PPO service areas are predicted to be 8 percent more costly than the national FFS average.[55] Recent enrollees in the Medicare program have the lowest risk scores, with a mean of 0.59. The vast majority of recent enrollees are the young elderly.

Beneficiaries enrolled in Medicare health plans (PPO, CCP) have lower risk scores on average than beneficiaries choosing traditional FFS Medicare. The mean risk score for PPO beneficiaries is 0.95, indicating that beneficiaries enrolled in PPOs are predicted to be 5 percent less costly than the national FFS average, and 14 percent less costly than the FFS average within the PPO combined service areas ((1.11 - 0.95)/1.11 = 14%). Therefore, like other Medicare health plans, PPOs are experiencing favorable selection compared to traditional FFS Medicare.

However, the average health status of PPO and competing CCP enrollees is virtually the same (0.95 for PPOs versus 0.96 for CCPs). It might be hypothesized that PPOs would attract a sicker enrollee mix than CCPs because PPOs offer greater access to providers through their out-of-network benefit and lesser in-network referral requirements. Greater provider access may be especially attractive to sicker beneficiaries who are utilizing a large volume of health services. The results do not support the hypothesis that PPOs are attracting sicker enrollees than CCPs.

Stayers comprise the vast majority of enrollees, so the risk score comparison for stayers is similar to that for all enrollees. (PPO stayers are Horizon PPO enrollees who were previously enrolled in Horizon's HMO.) Nonstayers are beneficiaries who enrolled in their current plan January 2003 or after, and includes beneficiaries who recently enrolled in the Medicare program and beneficiaries who switched plans (including from one health plan to another). Most recent program enrollees are aged 65 to 70 and have similar risk scores based on demographic

[55] National average risk scores have risen by up to 5 percent per year over the last decade because of more complete diagnostic coding. The higher-than-average mean risk score among beneficiaries residing in PPO service areas could be due to this "creep", since the model used to derive the risk scores was calibrated on 1999/2000 data.

**Table 5-9**
**Mean risk scores[1] by plan type, PPO[2] service areas[3]**

| Group | All Beneficiaries N | All Beneficiaries Risk Score | PPO N | PPO Risk Score | CCP N | CCP Risk Score | Other Medicare Health Plan N | Other Medicare Health Plan Risk Score | FFS N | FFS Risk Score |
|---|---|---|---|---|---|---|---|---|---|---|
| Total | 8,644,881 | 1.08 | 89,420 | 0.95 | 1,716,104 | 0.96 | 158,403 | 0.95 | 6,680,954 | 1.11 |
| Stayers[4] | 7,628,269 | 1.11 | 39,993 | 0.96 | 1,400,241 | 0.98 | 110,503 | 0.96 | 6,077,532 | 1.15 |
| Nonstayers[5] | 1,016,612 | 0.78 | 49,427 | 0.93 | 315,863 | 0.87 | 47,900 | 0.92 | 603,422 | 0.71 |
| Recent Medicare enrollees[6] | 591,175 | 0.59 | 7,401 | 0.58 | 74,838 | 0.56 | 7,572 | 0.56 | 501,364 | 0.60 |
| Switchers[7] | 425,437 | 1.04 | 42,026 | 0.99 | 241,025 | 0.97 | 40,328 | 0.98 | 102,058 | 1.25 |

[1] Centers for Medicare & Medicaid Services (CMS) Hierarchical Conditions Categories (HCC) risk score for 2004. Based on lagged all-encounter diagnoses from July 2002 through June 2003. Beneficiaries with a complete diagnostic profile from July 2002 through June 2003 were given the community CMS-HCC risk score. All other beneficiaries were given the CMS new enrollees demographic risk score.

[2] PPO is preferred provider organization. CCP is coordinated care plan. FFS is fee-for-service.

[3] Includes beneficiaries with Part A and Part B coverage as of March 2004, residing in the service area counties of any PPO demonstration contract, for whom a risk score was available.

[4] Beneficiaries who were continuously enrolled in the same Medicare plan since December 2002. Includes beneficiaries enrolled in the Horizon PPO contract who were enrolled in the Horizon HMO contract prior to January 1, 2003.

[5] Beneficiaries who enrolled in their current plan January 2003 or after.

[6] Beneficiaries who newly enrolled in the Medicare program January 2003 or after.

[7] Beneficiaries who switched their Medicare plan (including from one Medicare health plan contract to another) since January 2003.

NOTE: Computer Output - y04a08zA.out

SOURCE: RTI analysis of CMS enrollment and risk score data.

information only. Recent enrollee risk score differences by plan type are minor, but PPOs attract a slightly less healthy mix of recent program enrollees than CCPs, but a slightly healthier mix than FFS.

Switchers comprise most PPO enrollees excluding Horizon stayers. PPOs and CCPs attract a similar risk mix among switchers, with average risk scores close to the national FFS average of 1.00 (0.99 for PPOs, 0.97 for CCPs). However, the mean risk score for beneficiaries switching from a Medicare health plan to traditional Medicare FFS is 1.25, meaning that these beneficiaries are predicted to be 25 percent more costly than the national FFS average. This result is consistent with the hypothesis that when health plan enrollees become sicker and desire increased access to specialists they tend to disenroll from their plan into traditional Medicare FFS, which does not have restrictions on choice of provider.

In summary, PPOs attract enrollees with an average health status that is similar to CCP enrollees. Both types of plans attract a healthier mix of enrollees than Medicare FFS.

## 5.6 Disenrollment

Voluntary disenrollment[56] from Medicare health plans is considered a possible measure of enrollee satisfaction. Voluntary disenrollment has been shown to be strongly correlated with direct measures of patient experiences with care, and it is an important complement to other measures of health plan performance (Lied et al., 2002). In this section, voluntary disenrollment is compared among PPO and competing CCP enrollees. After defining the analysis sample, the results are presented.

*Analysis Sample*

The August 2004 Group Health Plan (GHP) File was used to analyze voluntary disenrollment in PPOs and competing CCPs over the analysis period January 1, 2003 through June 30, 2004 (the first 18 months of the PPO demonstration). Because 31 of 35 PPO contracts were operational throughout the analysis period, the set of CCPs was restricted to those CCPs that were operational throughout the analysis period in at least one county in the combined PPO service area counties.[57]

The analysis sample for the comparison of PPO and CCP voluntary disenrollment consists of all beneficiaries with the following characteristics:

- at least one month of enrollment in a PPO or CCP during the analysis period,
- alive at the end of the analysis period,
- residing in the combined PPO service areas at the end of the analysis period, and
- enrolled in Medicare at the end of the analysis period.

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[56] Voluntary disenrollments exclude involuntary disenrollments due to death, plan withdrawal, moving out of the service area, or loss of Medicare eligibility.

[57] For the sake of consistency, four PPOs were dropped that were not operational throughout the entire analysis period.

The analysis sample excludes decedents and beneficiaries who moved out of the PPO service areas. This sample is similar to the sample used to examine enrollment earlier in this chapter. Note that the number and proportion of voluntary disenrollees were calculated for PPOs and CCPs; the proportion is the "disenrollment rate." As with the enrollment analysis earlier in this chapter, voluntary disenrollment was analyzed among nonstayers as well as all sample members.

*Voluntary Disenrollment*

***Table 5-10*** presents the results for voluntary disenrollment among PPOs and CCPs in the combined PPO service areas. Overall, there were 112,368 PPO enrollees over the analysis period, 13,783 disenrollees, thus a disenrollment rate of 12.3 percent. For CCPs the disenrollment rate was 13.1 percent. Therefore, for the overall analysis sample, voluntary disenrollment among PPO and CCP enrollees is similar.

**Table 5-10**
**Voluntary disenrollment in combined PPO service areas, by plan type, January 2003 through June 2004[1,2,3]**

| | PPO | CCP |
|---|---|---|
| Overall | | |
| Enrollees | 112,368 | 2,024,782 |
| Disenrollees | 13,783 | 264,720 |
| Disenrollment Rate | 12.3% | 13.1% |
| | | |
| Nonstayers[4, 5] | | |
| Enrollees | 68,001 | 434,676 |
| Disenrollees | 10,185 | 57,057 |
| Disenrollment Rate | 15.0% | 13.1% |

1 Analysis sample consists of beneficiaries with at least one month of PPO or CCP enrollment during the analysis period. PPO is preferred provider organization. CCP is coordinated care plan.

2 Beneficiaries restricted to those alive, residing in the PPO combined service areas, and enrolled in Medicare at the end of the analysis period.

3 CCPs restricted to those that were operational throughout the analysis period in at least one county in the combined PPO service area counties.

4 Beneficiaries who are not continuously enrolled in the same contract from December 2002 to the end of the analysis period. Enrollees in the Horizon HMO in December 2002 are excluded from PPO enrollees.

5 Disenrollment is calculated for enrollment spells beginning during the analysis period.

NOTE: Computer Output - DA07UB

SOURCE: RTI analysis of August 2004 Group Health Plan (GHP) and March 2004 Health Plan Management System (HPMS) Service Area.

All PPO demonstration enrollment periods (except for those of Horizon stayers) begin during the demonstration period, thus all PPO enrollees are nonstayers. The most comparable sample of CCP enrollees is those who also have an enrollment period beginning during the demonstration period; that is, CCP nonstayers or "recent CCP enrollees." Disenrollment rates of PPO and CCP nonstayers are most comparable. Disenrollment of enrollees with longer tenure in a plan (stayers) may differ from disenrollment of recent plan enrollees (switchers and recent Medicare program enrollees).

As shown in Table 5-10, the number of nonstayer PPO enrollees during the analysis period was 68,001. There were 10,185 PPO disenrollees among nonstayers; a disenrollment rate of 15.0 percent. This can be compared to the nonstayer disenrollment rate for CCPs, which was 13.1 percent, the same rate as for the entire analysis sample. Thus, disenrollment appears to be moderately higher (15 percent greater) among PPO enrollees than among recent CCP enrollees. One interpretation of this result is that PPO enrollees are somewhat less satisfied with their plan experience than recent CCP enrollees. This could be because PPOs are a new type of plan, and beneficiaries may not have experienced what they expected in all cases. For example, the case study interviews revealed that some beneficiaries may have disenrolled when certain providers refused to accept a PPO's out-of-network benefit (Greenwald et al., 2004). Another related factor may be enrollee confusion over the PPO model. Our case study interviews also revealed that some beneficiaries were confused about how PPOs differed from other CCP models. As enrollees learn about this new model, they may be more likely to disenroll.

However, considerable caution should be exercised before concluding that PPO enrollees are less satisfied than recent CCP enrollees. First, the difference in disenrollment rates is modest. Second, the disenrollment rate does not measure satisfaction among continuing plan enrollees. Third, the analysis examined only early experience with disenrollment over the first 18 months of the demonstration. As PPOs become more mature, their patterns of disenrollment could markedly change. For example, early operational problems—such as the refusal of some providers to honor PPO out-of-network benefits—should be ironed out. As enrollees become more familiar with the PPO concept, beneficiary postenrollment experiences may more closely match preenrollment expectations. On the other hand, as a growing portion of PPO enrollees have longer plan tenure, average enrollee health status may decline. As enrollees use more services on average, the possibility for dissatisfaction with PPO managed care restrictions or cost sharing rises, which might lead to higher disenrollment rates to FFS.

Two CMS-sponsored surveys will provide more information on beneficiary satisfaction with PPOs versus CCPs and FFS. As part of this project, RTI is conducting a survey of PPO, CCP, and FFS enrollees in each PPO's service area, which will provide data on the satisfaction of current enrollees in different plan types. CMS also sponsors a survey of managed care plan disenrollees, which will include PPOs.

# SECTION 6
# CONCLUSIONS

The Medicare PPO demonstration is a major CMS initiative to provide an additional managed care option for Medicare beneficiaries. PPOs are the most popular form of insurance in the employer-sponsored insurance market, but Medicare beneficiaries had very little access to them before the inception of the demonstration PPOs in 2003. As is evident in the 2003 MMA, Congress foresaw a key future role for PPOs in Medicare by authorizing regional PPOs beginning in 2006.

The findings from this initial quantitative analysis of the demonstration PPOs suggests that this model may fulfill some, but not all, of Medicare's goals. Overall, a number of demonstration PPOs were willing to offer plans to a wide range of counties. This relatively widespread coverage of PPOs under the demonstration is a promising sign that PPOs might be willing to participate in Medicare as a more permanent part of the program. While the demonstration PPOs increased the number of managed care options available to beneficiaries in many counties, these PPOs also tended to locate in urban or near-urban areas, and in many counties with existing Medicare managed care plans. This finding may be largely related to the very aggressive timelines associated with the demonstration. Nonetheless, the fact that the demonstration PPOs largely did not locate in rural areas may call into question whether this model is more viable in these traditionally underserved areas than other managed care models.

An important aspect of the PPO demonstration was to test beneficiary response to wider availability of Medicare PPOs. This analysis revealed that despite aggressive marketing by most of the demonstration PPO plans, enrollment has been slow but steady . This finding may be related to the generally higher premiums charged by PPOs relative to competing CCPs in the same counties. In addition, given PPOs' popularity and dominance in the private sector, there is some expectation that PPOs might be more attractive to FFS beneficiaries than other CCPs (mostly HMOs). This expectation can be justified based on PPOs' greater freedom of provider choice. However, the demonstration PPOs are drawing about the same proportion of their enrollees from FFS as are CCPs. Also, the demonstration PPOs are drawing a somewhat lower proportion of their enrollees than CCPs from recent Medicare enrollees, which is not consistent with the hypothesis that PPOs are especially attractive to beneficiaries aging in to Medicare.[58]

The remainder of this chapter summarizes the findings in greater detail.

## 6.1 Findings on PPO Market Entry

Medicare demonstration PPOs are widely available, but only in selected areas. As of April 2004, the demonstration included 17 parent companies operating 35 PPO contracts and 61 PPO plans. Among these demonstration sites, PPO service areas are located in 21 states in all four census regions, and in 9 of the 10 CMS regions (there are no PPO demonstration plans in the CMS Denver regional office area). PPO contracts are concentrated in the Mid-Atlantic,

[58] As mentioned above, PPO demonstration plans may have less developed arrangements to accept direct age-ins from employer group plans than existing M+C plans, which could account for the lower proportion of recent Medicare enrollees in PPO plans.

Midwest, and Southeast states (29 of 35 contracts). Of particular interest is that there are no demonstration contracts operating in California, the largest Medicare managed care market. One demonstration parent company, PacifiCare, originally proposed PPO contracts in two major California counties (Los Angeles and Orange), but withdrew their applications for these sites because they could not successfully negotiate networks among providers who were still heavily committed to the traditional HMO model. This may suggest that certain markets, such as California, remain entrenched in HMOs and may be less likely to support PPOs.

PPOs are distributed across the country, but they tend to locate in selected areas, primarily in urban counties. Among the demonstration sites, PPOs are offered in 7 percent of all U.S. counties, including 27 percent of large metropolitan counties, 10 percent of medium/small metropolitan counties, 5 percent of micropolitan (small city) counties, and 1 percent of rural counties. But Medicare demonstration PPOs are less likely than other CCPs to be offered in rural areas. A higher proportion of PPO than other CCP service area counties are in large metropolitan areas (51 versus 39 percent), and a lower proportion are in rural areas (4 versus 15 percent). There is no evidence from the demonstration that PPOs are more likely than other types of managed care plans to expand Medicare health plan options in rural areas. The short time frame for demonstration implementation required reliance on existing managed care provider networks and may have limited PPO entry in rural counties, which largely lack existing networks. But the inability to negotiate favorable discounts with monopoly rural providers and other issues will continue to hinder PPO entry into rural areas (Greenwald et al., 2004).

In terms of improving beneficiary choice of managed care options, Medicare demonstration PPOs have located mostly where other coordinated care options are available, but have increased beneficiary choice of such options. Nationwide, approximately one quarter (23.9%) of Medicare beneficiaries can enroll in a PPO. In 21 of the 222 PPO service area counties (10 percent), PPOs are the only coordinated care option. In 72 counties (32 percent), PPOs increase beneficiaries' choice of coordinated care contracts from one to two, in 66 counties (30 percent) from two to three, and in 63 counties (29 percent) they add an option to three or more other coordinated care contracts. Hence, in over two thirds of their service area counties, PPOs are adding a choice to zero, one, or two other coordinated care contracts. Although PPOs have not significantly extended managed care options to areas where they would otherwise be unavailable, they have added a managed care option to a small number of other managed care options in the majority of their service area counties.

The descriptive analysis also looked at factors that might increase the likelihood of PPO plan entry. One factor considered was the effect of the higher county demonstration payment rates offered as an incentive for managed care parent companies to participate in the demonstration. In 2003, as part of the PPO demonstration, CMS offered to pay demonstration plans the higher of the regular M+C capitated county rate or 99 percent of Medicare FFS per capita expenditures. If this incentive was effective in inducing plan entry, one would expect to see greater entry in counties where the demonstration payment rate was higher than the usual M+C rate. However, higher Medicare demonstration county payment rates did not increase PPO availability. It may be that the extra payments were simply too small to be effective or that they were viewed as transitory by health plans. Indeed, MMA raised payments in 2004 for all MA plans to at least 100 percent of FFS.

To supplement the descriptive analyses, a multivariate analysis of plan market entry was conducted. The dependent variable in the regression is a binary variable, indicating whether or not any PPO demonstration plan is serving Medicare beneficiaries in the county. Findings from this model suggested that the most powerful predictor of PPO plan entry was greater existing managed care presence in potential market areas. Counties with higher commercial PPO or HMO, or Medicare managed care, penetration had increased likelihood of Medicare PPO demonstration plan entry. This is consistent with information gathered from the site visits, where plans stated that having an existing provider network in place in an area was crucial to joining the demonstration.

Counties in metropolitan areas, especially those of 1 million population or more, were more likely to attract entry. PPO entry was more likely in counties with higher payment rates for all plans, but higher incremental demonstration payment rates had little impact on predicted PPO plan entry. This is consistent with findings from site-visit discussions with plans. Most plans indicated that the additional payments offered under the PPO demonstration were not as important to the entry decision as several other factors.

## 6.2 Findings on PPO Plan Offerings

Demonstration PPO monthly premiums are generally higher than competing CCPs, although less than Medigap plans. PPO monthly premiums are typically $51 to $100, compared with $0 for competing CCPs and $101 to $150 for the most popular Medigap plan. On average, PPOs charge more than twice as much as competing CCPs, $76 versus $29. About half of competing CCPs have no monthly premium, whereas all but two of 61 PPO plans charge a monthly premium. Consequently, the typical (median) PPO premium is $69 per month, whereas the typical competing CCP does not charge a premium. PPOs charge about $50 less than Medigap F, which usually costs between $101 and $150 per month. In sum, PPOs are a mid-priced product, costing more than HMOs because of PPOs' out-of-network coverage, but less than Medigap because PPOs impose greater beneficiary cost sharing, especially for out-of-network providers. Whether these monthly premium rates affected beneficiary enrollments will be a key topic of the analysis of the PPO demonstration enrollee and nonenrollee survey currently in the field.

Regarding overall PPO plan cost sharing, in-network PPO cost sharing is lower than competing CCP cost sharing for inpatient admissions, but is similar for other services as a group. For in-network physician office visits, both PPOs and CCPs typically charge a co-payment of $10 for primary care physicians and $20 for specialists. For out-of-network visits, most PPOs impose the Medicare FFS level of 20 percent coinsurance for primary care physicians and specialists. But a few charge 30 percent coinsurance, exceeding the Medicare FFS level. Predicted PPO in-network out-of-pocket costs for physician services are roughly half or less than FFS costs. Predicted PPO and CCP physician costs are similar for primary care physicians, but PPO costs are lower for specialists.

Hospital inpatient cost sharing varies, but in-network PPOs typically charge a co-payment of $100 per day of a stay, often limited to the first 5 or 10 days of the stay. Alternatively, they might charge a $250 co-payment per stay. A small percentage of PPOs—and a slightly larger percentage of CCPs—charge nothing for an in-network admission. Out-of-

network, PPOs typically charge 20 percent coinsurance or $750 per stay. Predicted PPO in-network inpatient cost sharing is less than a third of predicted FFS costs and about 60 percent of predicted CCP costs. PPOs particularly wish to encourage in-network inpatient utilization, and avoid undiscounted, unmanaged out-of-network admissions.

For hospital outpatient services, PPOs typically charge 10 percent coinsurance or $50 per in-network visit, while CCPs charge $50 to $100 per visit or 20 percent coinsurance. Up to a third of PPOs and CCPs charge nothing for in-network hospital outpatient services. For out-of–network hospital outpatient services, PPOs typically charge 20 percent coinsurance, the Medicare FFS level. But again, a few charge 30 percent. Predicted in-network PPO (and CCP) cost sharing is low relative to FFS for outpatient hospital (including outpatient surgery), services that can substitute for expensive acute inpatient care. PPO in-network cost sharing is 80 percent of competing CCP cost sharing.

Excluding hospital inpatient, in-network PPO and CCP predicted costs (including expenses for uncovered services) are similar overall, but their relationship varies by service. As discussed above, PPO cost sharing is lower for physician specialist and hospital outpatient, and is also lower for skilled nursing facility. But predicted PPO costs are higher for home health and durable medical equipment, services used by frail, impaired beneficiaries who may be at high risk for out-of-network utilization.

An important feature of benefit plan design related to cost sharing is the availability of an out-of-pocket maximum that limits enrollee risk. Most of the demonstration PPOs do not have global out-of-pocket maximums, which exposes enrollees, especially those who use out-of-network services, to sometimes significant financial liability and risk. Only 24 of 61 (39 percent) of PPOs' benefit plans have in-network global out-of-pocket maximums.[59] Even fewer PPO benefit plans, 14 of 61 (23 percent), have out-of-network global out-of-pocket maximums. Among PPOs that have maximums, the in-network global out-of-pocket maximum is typically about $1,800. When it exists, the out-of-network out-of-pocket maximum is typically about $3,250. A smaller percentage of competing CCPs than PPOs offer an in-network global out-of-pocket maximum (30 versus 39 percent), and it is typically somewhat greater when it exists ($2,560 versus $1,800). Very few CCPs offer any out-of-network coverage.

Demonstration PPOs are more likely than competing CCPs to provide some coverage for prescription drugs, but among plans with a drug benefit, PPO coverage is less generous on average. In part because CMS encouraged a drug benefit as a condition of demonstration participation, 82 percent of the demonstration PPO plans offer an outpatient prescription drug benefit. PPOs are more likely than competing CCPs to offer a drug benefit (82 versus 70 percent.) However, only 42 percent of PPO drug benefits cover brand drugs, compared with 53 percent of CCP benefits. Of plans covering generics only, about one third of PPO plans offer unlimited generics compared with about two thirds of CCPs. When there is a maximum, it is typically $500 in PPO plans compared with $800 in CCPs. The typical brand-only annualized maximum in PPO plans is $600 compared with $900 in CCPs. PPOs told us it was important to

[59] Another 13 percent of PPOs (and 18 percent of competing CCPs) have in-network inpatient-only out-of-pocket maximums.

have a drug benefit to attract enrollment (Greenwald et al., 2004), but may have limited it to keep their premiums down or fund their out-of-network benefit.

## 6.3 Findings on Enrollment and Disenrollment

While demonstration PPO plan enrollments have been building, most of the initial enrollment in the PPO demonstration was in a single contract, Horizon Healthcare of New Jersey. Non-Horizon enrollment was very low at the demonstration's inception in 2003, but has steadily increased and now accounts for more than half of total demonstration enrollment of about 105,000 beneficiaries. Enrollment in many demonstration contracts remains quite small. Beginning enrollment in the demonstration was about 53,000, most of which was due to the Horizon contract (about 45,000 of the 53,000). Almost all of the initial Horizon enrollees transferred from a Horizon Medicare HMO product. The other 30 demonstration contracts effective January 1, 2003, accounted for less than 9,000 enrollees initially, an average of less than 300 per contract. Enrollment in the Horizon contract grew only slightly through the first 20 months of the demonstration.

The analysis revealed that 42 percent of demonstration PPO enrollees were previously enrolled in FFS, 43 percent were previously in other Medicare health plans, and 15 percent were enrollees new to the Medicare program. Recent enrollees in competing CCP had a similar prior history, with a somewhat larger proportion deriving from recent Medicare program enrollees. Among the enrollees PPOs are drawing from other Medicare health plans, about two thirds were previously enrolled in unaffiliated plans and about one third in affiliated plans. There was some expectation that PPOs would be more attractive to FFS beneficiaries than other CCPs (mostly HMOs) because of PPOs' greater freedom of provider choice. But PPOs are drawing about the same proportion of their enrollees from FFS as are CCPs. Also, PPOs are drawing a somewhat lower proportion of their enrollees than CCPs from recent Medicare enrollees, which is not consistent with the hypothesis that PPOs are especially attractive to new Medicare enrollees.

Regarding the characteristics of PPO enrollees relative to other Medicare beneficiaries, demographic and health status characteristics of PPO enrollees are similar to those of recent enrollees in competing CCPs, except that PPOs are enrolling fewer blacks and other minorities and fewer Medicaid recipients. Like other CCPs, PPOs are experiencing favorable selection relative to Medicare FFS. The age distribution of PPO enrollees is generally similar to that of recent competing CCP enrollees. A slightly lower percentage of PPO than CCP enrollees are aged 65 to 69, and a slightly higher percentage are aged 70 to 74 and 75 to 84. This is consistent with findings reported above that PPOs are not capturing a disproportionate share of the new Medicare enrollee or "age in" market. PPOs seem to be somewhat more popular among the mid-range elderly aged 70 to 84. Six percent of PPO enrollees are aged 85 or older (the "oldest old"), a share equal to that of recent CCP enrollees. The share of enrollees younger than age 65, most of whom are entitled by disability, is nearly the same among PPO and recent CCP enrollees. This is not consistent with the hypothesis that PPOs are especially attractive to disabled beneficiaries who may have difficulty obtaining Medigap supplemental coverage but want to avoid the provider access restrictions of HMOs. A smaller share of PPO enrollees than recent competing CCP enrollees are blacks and other minorities, and are on Medicaid. This may be related to the higher PPO than CCP monthly premiums and lower incomes among blacks and Medicaid recipients.

The average health status of PPO and competing CCP enrollees is virtually the same (0.95 risk score for PPOs versus 0.96 for CCPs).[60] PPOs are not attracting sicker beneficiaries than CCPs despite the potential attractiveness of their out-of-network benefit to beneficiaries utilizing many health services. But Medicare health plan enrollees—both PPO and CCP—are healthier on average than enrollees in traditional Medicare FFS, who have a mean risk score of 1.11. Beneficiaries switching into PPOs or CCPs from FFS or other health plans have almost identical mean risk scores, as do new Medicare beneficiaries enrolling in either type of plan. Because new beneficiaries, who have much lower average risk scores, comprise a larger proportion of recent CCP than PPO enrollment, recent enrollees in CCPs are slightly healthier overall. In sum, the average health status of PPO and CCP enrollees is very similar, and both are experiencing favorable selection relative to Medicare FFS. PPOs, of course, are start-up plans, and it is possible that the average health status of their enrollees will decline over time as the tenure of their enrollees increases.

The voluntary disenrollment rate among all PPO demonstration enrollees is similar to the rate among competing CCP enrollees. However, voluntary disenrollment among demonstration enrollees excluding continuing enrollees in the Horizon demonstration plan is modestly higher than voluntary disenrollment among recent enrollees in competing CCPs.

Among all PPO enrollees in plans effective January 2003, the 18-month (January 2003 through June 2004) voluntary disenrollment rate was 12.3 percent, slightly lower than the 13.1 percent rate among all competing CCP enrollees over the same period. But when enrollees continuing from the Horizon HMO to the Horizon PPO demonstration contract are excluded, the PPO disenrollment rate rises to 15.0 percent. The comparable CCP rate, restricted to CCP enrollees with enrollment periods beginning during the demonstration period, remains at 13.1 percent. This is weak evidence of a higher voluntary disenrollment rate in PPOs than competing CCPs, which could indicate slightly greater dissatisfaction among PPO than recent CCP enrollees. To the extent the observed difference is meaningful, it could arise from the newness of Medicare PPOs, which might create misunderstanding and unfulfilled expectations among some beneficiaries, and early operational difficulties with providers. For example, in our case study interviews we were told of disenrollment due to some providers' unwillingness to accept PPO out-of-network benefits. In the case study, demonstration PPOs also stressed how little potential enrollees knew about the PPO model. As PPOs mature, their disenrollment patterns could change. Two surveys--RTI's survey of PPO and comparison enrollees as part of this project and the CMS-sponsored survey of managed care disenrollees--will provide more information on beneficiary satisfaction and reasons for disenrollment.

[60] Risk scores indicate predicted future Medicare expenditures relative to the national average of 1.00.

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